Focusing the equity lens

Arguments and actions on health inequalities

Edited by

Sue Povall

Margaret Whitehead

Rachael Gosling

Ben Barr

WHO Collaborating Centre for Policy Research on Social Determinants of Health

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Arguments and actions on health inequalities

Synthesis of discussions from an Expert Group Meeting

World Health Organization Collaborating Centre for Policy Research on Social Determinants of Health, University of Liverpool, 18th and 19th October 2007

Edited by:
Sue Povall, Margaret Whitehead, Rachael Gosling and Ben Barr
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Edited by: Sue Povall, Margaret Whitehead, Rachael Gosling and Ben Barr

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Contents

Participants

Dr. Fiona Adshead
Deputy Chief Medical Officer
Department of Health
London, UK

Professor Aikan Akanov
Rector, Kazakh National Medical University
Almaty, Kazakhstan

Dr. Joan Benach
Co-chair, Employment Conditions Knowledge Network (EMCONET)
Global Commission on Social Determinants of Health;
Associate Professor
Occupational Health Research Group
Universitat Pompeu Fabra
Barcelona, Spain

Dr. Tatjana Buzeti
Director, Centre for Health and Development
Murska Sobota, Slovenia

Dr. Nino Chanturidze
Chief Policy Specialist
Department of Sectoral Policy
Ministry of Labour, Health, and Social Affairs, Georgia

Professor Göran Dahlgren
Health Economist, Public Health Advisor and Visiting Professor
University of Liverpool, UK

Professor Finn Diderichsen
Head, Department of Social Medicine
Institute of Public Health
University of Copenhagen, Denmark

Dr. Mark Exworthy
Reader in Public Management and Policy, School of Management
Royal Holloway-University of London, UK

Mr. Peter Flynn
Technical Adviser to WHO, UK

Dr. Amiran Gamkrelidze
WHO Country Programme Coordinator for STIs/HIV/ADIS
Georgia

Dr. Maciek Godycki-Cwirko
Head, Department of Family and Community Medicine
Medical University of Lodz, Poland

Professor Hilary Graham
Professor of Health Sciences
University of York, UK

Dr. Paula Grey
Director of Public Health
Liverpool Primary Care Trust, UK

Dr. Dimitri Gugushvili
Adviser
Department of Sectoral Policy
Ministry of Labour, Health and Social Affairs, Georgia

Dr. Rene Loewenson
Knowledge Network on Health Systems, Global Commission on Social Determinants of Health;
Director, Training and Research Support Centre, Zimbabwe

Dr. Andreas Mielck
Deputy Head, Health Systems Analysis RG, Helmholtz Zentrum Muenchen - German Research Center for Environmental Health
Institute of Health Economics and Health Care Management
Neuherberg, Germany

Dr. Bosse Pettersson
Senior Adviser on Public Health Policy, Swedish National Institute of Public Health, Sweden

Professor Jennie Popay
Chair, Social Exclusion Knowledge Network (SEKN), Global Commission on Social Determinants of Health;
Professor of Sociology and Public Health Institute of Health Research
Lancaster University, UK

Dr. Tone Poulsson Torgersen
Senior Adviser
Norwegian Directorate of Health and Social Affairs, Norway

Dr. Alex Scott-Samuel
Clinical Senior Lecturer
Division of Public Health
University of Liverpool, UK

Professor Alan Shiell
Professor and AHFMR Senior Health Scholar, Department of Community Health Sciences
University of Calgary, Canada

Dr. Sarah Simpson
Technical Officer for Health Promotion, WHO European Office for Investment for Health and Development, Venice, Italy

Dr. Alena Steflova
Head of Country Office
WHO Country Office, Czech Republic

Professor Margaret Whitehead
W.H. Duncan Professor in Public Health, Division of Public Health
University of Liverpool, UK

Dr. Erio Ziglio
Head, WHO European Office for Investment for Health and Development Venice, Italy

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Source: Adapted from Dahlgren and Whitehead (2007, pp.5-7)

Equity in health: This implies that, ideally, everyone could attain their full health potential and that no one should be disadvantaged from achieving this potential because of their social position or other socially determined factors. It implies fair process as well as fair outcomes.

Social inequalities in health: These are systematic differences in health status between socioeconomic groups, as measured by income, education and occupation. All systematic social inequalities in health within a country are socially produced, modifiable and unfair.

The phrases *social inequities in health* and *social inequalities in health* are synonymous in this report: They both carry the same connotation of systematic health differences between socioeconomic groups that are unfair and unjust.

Relative differences in health: These are expressed as a ratio: the rate of a particular health outcome in a disadvantaged group divided by the rate of that health outcome in the reference group – for example, the number of deaths per 100,000 population due to a certain disease in the disadvantaged group, divided by the equivalent death rate in the most privileged group. A change in the value of the ratio can indicate whether the health of one group has improved relative to another. The ratios will not show whether that change has resulted from improvements in both groups, an improvement in one and a decline in the other, and so on.

Absolute differences in health: These are expressed as a difference between two values: the subtraction of the rate of a particular health outcome in a disadvantaged group from the rate of that health outcome in the reference group. Absolute differences measure the change in the absolute level of health in two groups.

Determinants of health: These are factors that influence health positively or negatively. This report focuses on social, economic and lifestyle-related determinants of health – that is, factors that can be influenced by political, commercial and individual decisions – as opposed to age, sex and genetic factors, which also influence health but are not, on the whole, open to influence by political or other types of action.

Determinants of social inequalities in health: These are social, economic and lifestyle-related determinants of health that increase or decrease social inequalities in health. These factors can always be influenced by political, commercial and individual choices/decisions.

Equity-oriented health policies: These are policies that aim to reduce or eliminate social inequalities in health.

1: Introduction

Background

The *WHO European Forum on Tackling the Social Determinants of Health and Reducing Health Inequalities,* hosted by the English Department of Health in London on 1-2nd March 2007, stimulated much debate about the practicalities of moving from evidence to action on this important subject. Participants from around Europe raised a number of issues with which they felt they needed more assistance when helping to inform policy development locally, nationally and internationally.

There was a clear need for an Expert Group Meeting to pick up some of the issues raised in the London Forum, specifically those that would help public health advisers and planners when advocating for action outside, as well as within, the health sector. Two particular themes were identified:

1. Marshalling convincing answers to some of the common arguments that public health advisers face when advocating for more equitable action to tackle the social determinants of inequalities in health.
2. What would policies aimed at tackling the social gradient in health actually look like (as opposed to ones concentrated on improving the health of disadvantaged groups only, or ones aimed at reducing the gap between rich and poor)? What policies of this nature are already in place in Europe? Are some of them being undermined, and if so how do we sustain/protect them in the future?

An International Expert Group Meeting was therefore convened by the WHO Collaborating Centre for Policy Research on Social Determinants of Health, University of Liverpool from 18-19th October 2007 to address these two themes, under the title of *Marshalling policy options and examples for tackling social determinants of inequalities in health* (the agenda is listed in **Annex 1**). The agenda built on, and utilised, the work that the Liverpool CC had carried out for the WHO in the form of the two "Levelling Up" reports (Whitehead and Dahlgren, 2007 and Dahlgren and Whitehead, 2007). The meeting was supported by funds from the Faculty of Medicine, University of Liverpool, Department of Health, London, North West NHS agencies, and WHO European Office.

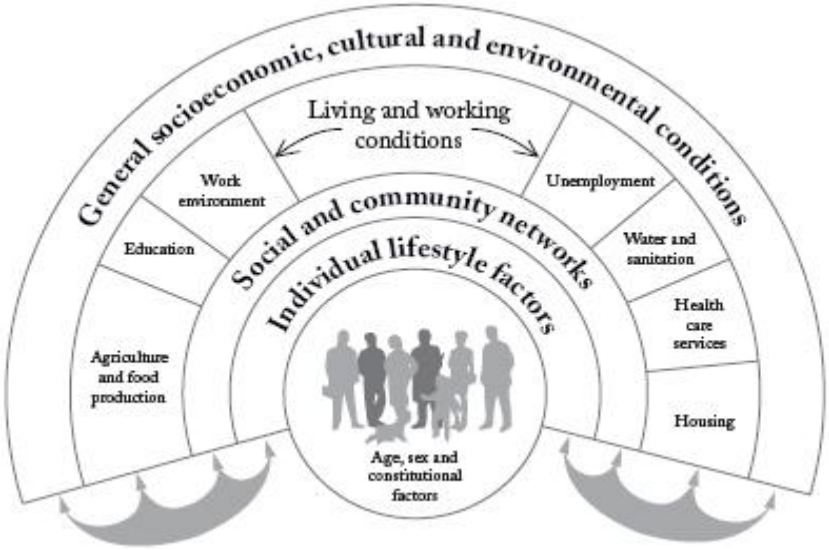
Participants from twelve European countries, Canada, and WHO Venice Office for Investment in Health and Development brought together their broad experiences in addressing social inequalities in health. There were many fruitful discussions, particularly around issues such as: the ways that social circumstances and unhealthy behaviours cluster and interact in more vulnerable groups; multi-sectoral action to improve health and reduce social inequalities in health; and the need for political commitment to and accountability for policies to improve health and address the social gradient in health outcomes.

Many of the discussions at the meeting were facilitated by presentations of concepts from the two "Levelling Up" reports (Whitehead and Dahlgren, 2007 and Dahlgren and Whitehead, 2007). Not all of those presentations are included in this document.

The reader is directed to the second "Levelling Up" report (Dahlgren and Whitehead, 2007) for a full discussion of the five main mechanisms by which social inequalities in health are generated from the determinants of health, the macro-policy environment, and multi-sectoral policy and actions to tackle social determinants of inequalities in health. This report focuses on distilling the arguments against common misconceptions and for policy examples in these areas.

A key concept referred to throughout the meeting is the "Rainbow Model", developed by Göran Dahlgren and Margaret Whitehead to demonstrate the different layers of influence on health and their interactions (see Figure 1.1). This is a well known figure and was used to facilitate discussions at different points during the meeting and many participants referred to it in their observations and comments, and so it is reproduced here for clarity.

Figure 1.1 The Rainbow Model: the main determinants of health



Source: *Dahlgren and Whitehead (2007), p.20; reproduced with permission*

Structure of the report

This report synthesises the key debates from the Liverpool meeting. Chapter 2 examines the claims or "contrary arguments" commonly put forward for either keeping the status quo or for doing the opposite of what is known from best evidence, and provides some responses.

Chapter 3 provides concrete examples and case studies from the meeting of actions to tackle social determinants of inequalities in health. Chapter 4 then discusses the processes that can facilitate or create barriers to successful policy implementation, and suggests actions that would improve this process. Finally, Chapter 5 summarises some of the key messages coming out of the meeting.

All sessions were digitally recorded on two recorders placed at either end of the meeting room. In addition, manual notes were taken in each session by a primary Rapporteur, a secondary Rapporteur and an Observer (Sue Povall, Rachael Gosling and Ben Barr in rotation). The Rapporteur notes were used to supplement transcriptions taken from the digital recordings. A thematic analysis of the transcriptions, together with the Rapporteur notes and observations were used to identify the key points arising from the meeting and to develop the synthesis presented in this report.

2: Marshalling convincing answers to contrary arguments

Introduction

Public health advocates meet resistance from several different quarters when arguing for action to tackle inequalities in health at their root causes. There are some common contrary arguments put forward for either keeping the status quo or for doing the opposite of what is known from best evidence. Some of these contrary arguments may be repeated so often that they become received wisdom. Participants in the meeting examined and challenged these claims and offered their answers to them. These discussions were facilitated by presentations from Margaret Whitehead on the five main mechanisms by which social inequalities in health are generated from the determinants of health, Hilary Graham on the three policy approaches to tackling social inequalities in health, and Göran Dahlgren on the mutual relationships between economic growth, poverty and social inequalities in health (see also **Annex 2** to this report). Below we present some of the key contrary arguments as claims, followed by the responses that arose from participants at the meeting.

Economic growth as a determinant of health

Claim: *Economic growth is a valuable objective in itself and will promote human development and better health as a matter of course.*

Response: It is correct that there is a long-term positive relationship between economic growth and improved health. The health effects of economic growth, however, also depend to a great extent on who is benefiting from the economic resources that are generated. The resources can be used in ways that promote the health and wellbeing of a small proportion of a society or they can be used to even out social and health benefits across society as a whole. We know from global studies, that if economic growth benefits the poor, if it reduces income inequalities, if it secures funds for public health systems and public education systems and so on, then the observed level of population health is likely to be above the expected level for a country at a particular level of economic development (for example, Costa Rica). If a country has the type of growth where the rich mainly benefit and where the public services are grossly underfunded, then population health is likely to be below that expected for a given level of economic development (for example, the USA). Therefore, economic growth should not be seen as an end in itself. It is essential to view economic growth as a resource.

> *…it's so obvious when you start looking at economic growth that it has no quality dimension what-so-ever. ….Economic growth has the same value whether it benefits millionaires or whether it benefits the poor. So, economic growth is really just a resource.* (Göran Dahlgren)

Just as income is a resource for an individual, economic growth is a resource for a society and should be assessed as to how well it is used to benefit society as a whole.

It is also important to distinguish between economic development and human development. A high rate of economic growth is not a measure in itself of human development. It is possible for a country to develop economically without a corresponding investment in human development and social welfare, which would lead to an increase in inequalities; in effect making material gain for the few more important than the welfare of the many. A distinction must, therefore, be made between efficient and inefficient economic growth strategies as related to human development, including improved health.

> *I am very happy to see a differentiation between economic growth and development. Because I think development is far more than just looking at what economic growth is about. It is impossible to locate health as a human right on the same level as the value of goods and services. That has to be quite clearly differentiated in the public health argument. There is a fundamental platform of human rights that we are talking about here, that have an inherent value that governments have committed to.* (Rene Loewenson)

Economic growth and inequality

Claim: *Reducing inequality in society would damage economic growth and therefore limit investment for health.*

Response: Experiences in African and Asian countries have shown that social inequality actually acts as a break on poverty reduction – it slows it down. Therefore, rather than inequality being a necessary driver of economic growth, for growth to be sustainable there needs to be early investment in the public sector and social welfare to reduce poverty.

> *…evidence from East Asia, and within Europe, shows that expenditure in health, education, social protection leads and not lags economic development*. (Aikan Akanov)

At a national level it is possible to balance economic growth with social investment to reduce inequalities. There are countries (like Sweden, Nicaragua and Costa Rica) that have better population health than would be expected for their level of national income. These countries recognise that there is unequal access to resources and they prioritise policies and programmes to address that.

The assumption that income inequalities are necessary for economic growth is predicated on the belief that people will strive to better their social position in a competitive socioeconomic environment, that they have equal access to the resources necessary to do so, and being lower down the national social scale will motivate them to want to do so. The reality is that power and resources are not equally distributed within societies, and that those societies with the widest income inequalities also have the widest differences in access to the resources fundamental to enabling people to change their socioeconomic circumstances: for example, access to education, employment, transport, health care. These are all important determinants of health and ill health. The lowest socioeconomic groups are those with least access to power and resources and are, therefore, the least able to climb the social ladder. Wide income inequalities may actually equate with low social mobility (Wilkinson and Pickett, 2007), creating groups of people stuck in poor social conditions, with limited access to resources and with consequently poorer health.

> *The USA has the lowest level of economic mobility for children born to poor parents – a poor child in the USA is less likely to escape poverty in adulthood than its European counterparts*. (Whitehead, 2008, p.1156)

A similar pattern has also been observed for nation states. It has been shown that a country's position in the global system, as measured by the nature of between country trade relationships, is an independent predictor of the level of infant mortality within it, even after controlling for factors such as national income, female literacy and political stability (Moore et al, 2006). The trading network is not equal; those countries on the periphery of the network (such as Kazakhstan and Nigeria) are structurally dependent upon, and subordinate to, the more powerful countries in the core of the network (such as USA and UK). For these peripheral countries, the ones that have the least power in the trade network, the rate of infant mortality is significantly and positively associated with their position in the network. This suggests that having the least power in the global trading system is detrimental for population health in the same way that having the least power in national systems has a detrimental effect on community and individual health.

Claim: *The high taxes that are needed to fund a strong welfare system limit economic competitiveness.*

Response: The empirical evidence refutes this claim. On the Global Competitiveness Index, for example, the high tax Nordic countries are ranked near the top in terms of competitiveness (in 2008-9: Denmark 3rd, Sweden 4th, Finland 6th and Norway 15th) (Schwab and Porter, 2008). It is not possible, therefore, to argue that high taxes and a strong welfare state limit economic competitiveness. The decision to minimise taxation and reduce welfare expenditure is a purely ideological one.

Health as a resource for economic growth

Claim: *Health is a resource for economic growth. It is a good public health strategy to point out that we are doing these health improvement programmes in order to achieve economic growth. Look at the fantastic benefits in terms of economic productivity!*

Response: There are dangers, from an equity point of view, in public health advocates relying on this argument too heavily. The claim overlooks the fact that these productivity measures are typically related to income. With such measures, improving the health and capacity to work of high- and middle-income groups increases productivity more than improving the health of an equal number of low-income people. With this definition of productivity, investments aimed at improving the health of low-income groups, pensioners and people at high risk of unemployment will be considered less important than investments in health that predominantly benefit working age adults in middle- and high-income groups.

It is important to state that the overall objective for investments in health is improved health for all and, in particular, for those socioeconomic groups with the greatest disease burden and risk of premature deaths. The economic benefits of this type of approach should then be seen as an additional positive effect of investments in health.

In this way, the public health priorities are put centre stage and do not risk being overrun by economic objectives. Phrased in this way the economic argument can be used very powerfully. Recent estimates show that within the European Union social inequalities in health resulted in 707 thousand deaths, 11.4 million life years lost, and 33 million cases of ill health per year (Mackenbach et al, 2007). The financial losses due to reduced productivity resulting from these social inequalities in morbidity and mortality were estimated as €141 billion or 1.4% of GDP; social inequalities in health were estimated to account for 15% of the costs of social security systems and 20% of the costs of health care systems across the European Union (Mackenbach et al, 2007). If these figures were reproduced at a country level they would provide powerful arguments for the benefits of equity-oriented health strategies.

> *If we argue that health is a way of promoting economic growth, I guarantee that we will get economists and treasurers half my age giving you a million and one reasons why you shouldn't do that because there are better ways of promoting growth. But if we can use the value added argument that says if we reduce inequalities, then here are the additional benefits that we get … then I think that's a powerful language.* (Alan Shiell)

The relationship between equity and efficiency

Claim: *There is a necessary trade-off between equity and efficiency. With finite resources, you have to maximise cost effectiveness by aiming to improve average health across the whole population ("efficiency") rather than aiming to reduce inequalities by improving the health of the worse-off at a greater rate than the better-off ("equity"), because the equity goal will cost more.*

Response: This is a false trade-off as it is only related to the improvement of average population health. But public health strategies in many countries have two main objectives: improving the average health of the population as a whole *and* reducing inequalities in health. *Both* objectives need to be met in the most efficient way possible – efficiency in the public health context applies to both targets. This holistic approach is further reinforced by the fact that health – unlike economic resources – cannot be redistributed among different socioeconomic groups.

That is not to deny that it is generally more difficult to achieve success in health improvement amongst more disadvantaged groups: it can take more resources to do so, and can therefore be more costly. More disadvantaged groups tend to have greater exposure to damaging determinants of health and interventions to reduce health-related behaviours tend to be less effective in these groups. For example, smoking is more prevalent in disadvantaged groups in many high-income countries, but, because short and long-term quit rates are lower in disadvantaged groups, it is more expensive to target interventions at these groups. In contrast, blanket interventions to change unhealthy behaviours tend to be adopted quicker and better by the educated middle classes than they are by disadvantaged groups. It is therefore, cheaper to reach articulate, educated, middle class people than it is to reach less privileged groups. This means that the effectiveness of many of these blanket health promotion interventions is actually pro-rich, the group that needs the least additional help.

> *So the efficiency with which we can promote health is anti-equitable – you can promote health*

easier in the groups that need it less. We do need to confront that. (Alan Shiell)

If interventions are funded based on narrowly-defined economic efficiency in terms of improving average population health, as the UK National Institute for Health and Clinical Excellence (NICE) does, it will lead to greater inequalities in health. That is why it is very important to recognise society's equity objectives and advocate for the assessment of efficiency of interventions in terms of inequality reduction.

The arguments about "levelling down" and "levelling up"

Claim: *Actions to reduce social inequalities in health can be dangerous because the health gap could be narrowed merely by reducing the health of the better-off groups in society to be nearer the level of the worse-off groups. You could end up killing healthier people just to achieve a reduction in the gap between healthy and unhealthy!*

Response: This is a spurious argument because "levelling down" in this way would not be considered equitable under any circumstances and is not advocated by anyone in the public health community.

That is why one of the main principles for tackling social inequalities in health is stated as "levelling up": a reduction in social inequalities in health can only be achieved by bringing up the level of health of people who are worse-off nearer to that of better-off groups (Whitehead and Dahlgren, 2007, p.16).

Health systems as cause of poverty

Claim: *It is true that being chronically ill can often lead to poverty, but at least in Europe the health care system is not exacerbating the problem.*

Response: Unfortunately, we cannot assume that European health care systems play no part in generating poverty. In a health care system that limits access through out-of-pocket payments there may be all sorts of linkages to poverty. Specifically, when these payments are high and a person has no choice but to go to hospital, then people are vulnerable to paying far more than they can afford. Unmet need, as well as unaffordable health care expenditures, constitutes a route into poverty in all countries where people have to pay a major share of the total health care costs out-of-pocket or via private health insurance and/or have inadequate compensation for income lost due to poor health. We see this in many low-income countries, where high medical costs have become a major cause of poverty.

So basically [in Georgia]*, poor households were left with only two options: either to refrain from using health services, which would lead to further deterioration of their condition, with all its adverse effects, such as decrease of their human capital and consequently their chances of participating in the labour market; or to take out loans or grants, which would also eventually lead to the medical poverty trap. Since these people had a very limited access to grants and loans - most of them were basically refraining from using health care services*. (Dimitri Gugushvili)

Some Western European countries are also moving in this direction. In those countries where average incomes are high and the government wishes to reduce public expenditure, ministers of finance may argue that those using the health services should pay more at the point of delivery. Assuming that introducing payments does not alter the extent to which the health services are used by different

socioeconomic groups, the effect would be a shift of the burden of payment for health services, where the sick would pay more and the healthy less. Given differences in the disease burden and the need for health services, this means that the elderly would pay more and working age people less, women pay more and men less, and low-income groups more and high-income groups less. In arguing for this, these ministers are thus failing to consider the pattern of age, gender and social differences in ill health. Increased user fees imply that, from a social equity in health perspective, those least able to pay for health care are expected to pay more of the total health expenditures. Out-of-pocket payments at the point of delivery can be described as a highly regressive tax on poor health. It is this type of health care financing which pushes people into poverty, i.e. generates the so called 'medical poverty trap'. The risk of being forced into this trap is increased in countries where there is little or no financial compensation for income lost during sick leave from work.

Increasing the share of private payments via user fees or private health insurance is a route into poverty and increased social inequalities in health, as many low-income groups are forced to reduce their use of the health services they need. The problem is even more acute in many Central and Eastern European countries, where more commercialised health care systems are being adopted and out-of-pocket payments are an increasing burden for nearly all sections of the national population. Even where there is a mixed economy of health care, where those that can afford to pay for health insurance do so and those that cannot are supported to some extent by the state, there is a middle group that may be left out of the provision of coverage for health care costs.

> … [the approach in Georgia is an] *example of people in the middle being left out. The people at the top were able to afford health care … and the ones at the bottom you were helping, but the groups in the middle were completely left out and were suffering.* (Margaret Whitehead)

Recognising the importance of inequalities in health in high- as well as low-income countries: values

Claim: *The social inequalities in health that we experience in rich European countries are of no real priority when compared with inequalities in a global context.*

Response:

> *If we tolerate any unfairness locally, we may start to tolerate unfairness globally. A constant focus on inequalities in health in our own neighbourhood is an important gateway to serious commitment globally*. (Tone Poulsson Torgersen)

It all comes down to the values underpinning a society. Most of our countries espouse the principle of health as a human right, and the existence of the substantial inequalities in health observed within our populations goes against accepted values of fairness and justice. The degree of inequality in a country is the product of the social and political values that dominate in that country. Values determine the priorities placed on social policies:

> *If you go back to the Liverpool experience – a whole range of different projects depended very much on different starting points. At the beginning, it was more or less saying if you were poor, you*

> *were to blame, so we had lots of social workers, then it was "your family are to blame" so we had education priority areas, then it was "your area is to blame", so we had lots of trees, then it was how the system operates that was to blame, so we had lots of restructuring of local government. The ideology behind each of these is important to understand as your starting point*. (Peter Flynn)

However, social pressure can influence political values and priorities, as illustrated by the countries represented around this table. Public pressure for equity in the 1940s to 1960s in Europe and the 1990s in South Africa influenced the political visions for change that made these societies more inclusive. Similarly in Slovenia:

> *I think that sometimes we forget that the politicians respond to the* [social-oriented] *value system of the population. So, even though we were a transition country, these values were not breaking down. We managed to keep the economic growth in Slovenia quite high, and keep also the redistribution of the gains of economic growth*. (Tatjana Buzeti)

If there is one message above all others coming out of this meeting, it is that values matter. Values determine the importance placed on promoting equity and human development in a society, the approaches taken to reduce social inequalities in health and the priority placed on those efforts. A government may espouse the values of social justice but implement policies in a way that limit the efficacy of efforts to reduce inequalities, as has been discussed above. It is important, therefore, to create a vision of the type of society we wish to create and engage policy makers and social movements alike in the development of such a society. Public health professionals have an important role to play in doing this.

> *I wonder whether, when we're looking at policies, we underestimate the importance of selling a vision. … And I wonder whether we have let our populations down in that what we are selling is in some sense a technical fix; you know, we've got these poor people who are in poor health. Rather saying, actually what we are trying to do is create a society where everybody's lives and everybody's health matters equally.* (Hilary Graham)

> *…I agree totally with Hilary's point about this vision. You've got to have some sort of coherent vision overall. And that leads me on to talk about how you kind of infuse values into the policy process at the same time as you're infusing evidence as well. It's how those two match together … aligning the vertical integration across different levels and that might be from making sure that vision is consistent…* (Mark Exworthy)

The problem becomes how to promote and ensure that there is a consistent vision of the sort of society we wish to build; one that survives changes in government. Here, engaging with the media can be extremely useful; the media can help shape social values and in that way support those social processes that foster and sustain that vision.

It's not just about lifestyle choices

Claim: *Unhealthy lifestyles as related to diet, exercise, smoking, alcohol, and so on, are the primary explanation of health inequalities. Health inequalities are largely the result of poorer lifestyle choices amongst poorer people.*

Response: These lifestyle factors, whilst clearly very important to an individual's health, do not account for all of the distribution in population health outcomes. The fact that unhealthy lifestyle factors themselves show a social gradient, being most prevalent in less skilled social classes and least prevalent in the highest, suggests that

there are social influences on the uptake of healthy and unhealthy behaviours. They are to a large extent structurally determined.

Margaret Whitehead presented five pathways to social inequalities in health (for a fuller explanation of these pathways see Dahlgren and Whitehead, 2007, pp.24-32):

1. **Different levels of power and resources:** The ways in which society is stratified and the extent of the gaps and distances between social groups are important determinants of health inequalities. These lead to differential access to resources, differential exposure to health risks and, therefore, different abilities to lead healthy lives.
2. **Different levels of exposure to health hazards:** Different social groups in society are exposed to different health risks such as poorer working conditions and opportunities for employment, more hazards, poorer living conditions and poorer access to services, as you move down the social scale.
3. **The same level of exposure leading to differential impacts:** Different socioeconomic groups may have different outcomes when exposed to the same level of health risk factors. This happens, for instance, when two or more risk factors interact and the resulting effect of those risk factors is multiplied, not just added together. Because there is a greater likelihood of disadvantaged groups being exposed simultaneously to several risk factors that reinforce each other in a synergistic way, the health-damaging impact is likely to be greater for them than for more privileged groups.
4. **Life course effects:** Different determinants of health operate over the life course. Disadvantage early in life can lead to poor health in adulthood. The effects of different determinants of health may accumulate over the life course.
5. **Different social and economic effects of being sick:** It may be that there are greater adverse impacts of illness as we move down the social scale. For example, people in lower socioeconomic groups may find it more difficult to maintain employment, and therefore income, when sick and at the same time may be faced with greater health care costs.

Participants at the meeting agreed that access to power and resources and the accumulation of advantage and disadvantage across the life course are the key determinants of social inequalities in health.

> *I'd suggest there is a hierarchy within the 5 principles: the first principle determines much of what is contained in the others. Differential resources and power is more primary than all the others*. (Alex Scott-Samuel)

> *The life course mechanism consists of the other mechanisms that add up and that multiply. We need to make that a special case - it is a way of introducing time into the model*. (Finn Diderichsen)

These two pathways create the conditions within which different risk conditions (poverty, for example) and risk factors (such as smoking, alcohol and physical activity) cluster and interact in the more vulnerable social groups.

> *In the study we did in the North West* [of England] *looking at health and social factors, by far the highest correlations were between lone parents, the unemployed and single carers and that is probably an expression of how that lack of power and resources is reflected in different groups and*

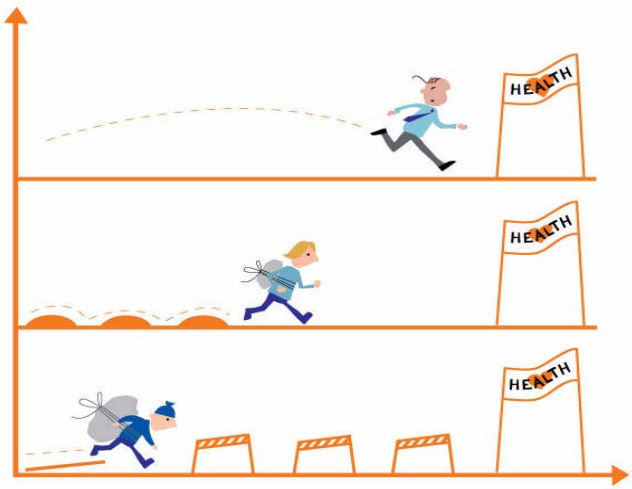
> *different areas. Different power and resources is the main driver behind health inequalities and if you ask anyone in Liverpool they would say poverty is what is behind inequalities.* (Peter Flynn)

> *We are increasingly facing a pattern that those with a low education, low income are not only smoking they are also having high blood pressure, high cholesterol, low physical activity, bad psychosocial working environments, poverty, and so on. To the extent that these risk factors increase each other's effects we will get a much stronger effect of each risk factor in the lower socioeconomic groups*. (Finn Diderichsen)

The interactions between health risk factors and conditions can multiply their effects, both at one point in time and across the life course. So that people who grow up in disadvantaged circumstances are more likely to smoke regularly in adulthood, and to be heavy smokers as adults. There are different layers of influence operating to create these patterns: clustering of risk conditions can lead to multiple risk factors; clustering of risk factors can lead to multiple diseases. This clustering of adverse social conditions and behavioural risk factors also means that more vulnerable groups may respond differently to their influence than other groups do, leading to differential outcomes. For example, in Sweden it has been found that among men with similar levels of heavy alcohol consumption, unskilled manual workers suffer greater alcohol-related health damage than professionals (see Chapter 3).

The observed social gradient in health outcomes is, therefore, a reflection of the complex interactions of the various exposures of different social groups to multiple health risks (depicted in Figure 2.1).

Figure 2.1 The interaction of risk conditions and risk factors to produce social inequalities in health



Source: Norwegian Ministry of Health and Care Services (2007, p.11); reproduced with permission

Because of this clustering of risk conditions and risk factors, the more disadvantaged groups are also likely to react more quickly to difficult social and environmental changes, and to recover more slowly from them, than more privileged groups. Also,

different social conditions will have an impact on lifestyle. Local social and cultural norms can influence the uptake of behaviours in particular communities, and services in some geographical areas are better than others at providing support to disadvantaged groups. The complexities of these social factors and how they interact with macroeconomic conditions need to be explored and understood.

So, it can be seen that lifestyle factors, such as smoking and diet, are mediating factors for social inequalities in health. Wider social conditions need to be addressed alongside efforts to promote healthier lifestyles; otherwise people will just substitute one health behaviour for another (for example alcohol for smoking). There is a need, therefore, to focus on the whole causal chain of health inequalities – from "upstream" policies to address such things as the macroeconomic causes of poverty and social inequalities, "midstream" policies to address the distribution and funding of services, and "downstream" policies to help individuals gain knowledge and skills.

> *When we talk about clustering of risk factors then by itself we have to go upstream… What is the reason for the combination of smoking, not doing so much sport, having diabetes? That is a question of clustering. And according to these clusters we have different approaches, maybe, to interventions, and different problems concerning efficiency or effectiveness of what we do… And we don't tend to blame the victim so much, as we have to go for the common and joined causes of these causes.* (Andreas Mielck)

A further complicating factor is that although programmes to change unhealthy behaviours are routinely evaluated against their aims, upstream policies are not evaluated to determine their impact on downstream risk factors. For example, interventions to increase employment or reduce poverty are not evaluated to determine their effects on risk factors such as smoking. The work of the main government departments, including the department of finance, is also not evaluated for its impact on social inequalities in health. So, for example, the UK Treasury (department of finance) initiated an inter-departmental cross-cutting spending review to establish what different government departments could do to reduce health inequalities. However, the instructions for the review were unclear.

> *We all got terrifically excited; this was something very important and very new. … Some of the sectors didn't really understand what the Treasury was looking for, so they came up with little projects instead of the sorts of things that we have been discussing, and so it turned out to be mainly a list of projects that the Treasury then looked at and then decided that they would fund some more small-scale projects. So the end result was very disappointing. It could have been really revolutionary to get the different sectors looking at what they're doing* [to contribute to the reduction in health inequalities in their mainstream activities]. (Margaret Whitehead)

But more than that, the Treasury did not include its own work in the review, and this was seen as a lost opportunity by the UK participants.

> *…it somehow managed to exempt the Treasury's own policies from its review. And there was no discussion or consideration of the impact of English or UK macroeconomic policy on health inequalities.* (Alex Scott-Samuel)

> *I think that the real dilemma for us is that if you are really going to look at all that you could do on inequalities you are basically reviewing all of government social policy. That's the problem. … It is always easier to look at other government departments' policies than look at your own. The Treasury has been excellent at looking at how we maximise productivity in the health sector, but there are only a few examples of using taxation instruments to improve health. The main one being tobacco taxation.* (Fiona Adshead)

More work is needed to understand the impact of upstream policies and the work of Government departments on the extent of social inequalities in health.

The argument for addressing the gradient in health across the whole of society

Claim: *All we need to do to reduce health inequalities is to target the poor health of poor people.*

Response: While attempting to improve the health of poorer people is a worthwhile goal in itself, it may, or may not, reduce social inequalities in health. In order to measure the health impact in terms of reduced or increased inequalities in health it is necessary to compare the improvements made among poor people with improvements made in better-off groups.

Hilary Graham put forward three ways of looking at policy options to address health inequalities and the policy advantages and disadvantages for each.

1. **Targeting the poor health of poor groups**: This has the goal to improve the health of poorest groups.
   Policy advantages: it directs resources and political focus to those who are losing out; it sets clear goals and clear criteria for monitoring; it aligns health inequality policies with wider health policy – it is easier if the health inequalities agenda runs along the grain of other policy directions. *Policy disadvantages*: it focuses on poverty and it conflates disadvantage with inequality. It is not addressing the structural causes for inequality; it includes only a minority of the population; it sets goals in line with trends (because the health of the groups ***has*** been improving in absolute terms in most high-income societies); it does not address the relative gap in health outcomes, so levels of health for these groups can still trail behind the rest of the population.

2. **Narrowing the gap**: This has the goal of reducing the gap in health outcomes between the richest and poorest groups by improving the health of the poorest groups fastest.
   Policy advantages: it emphasises the point that despite absolute improvement in the health of poorest groups, they may be losing out in terms of overall improvements in health; it facilitates target setting; it seeks to reverse trends (ambitious targets); it aligns health equity policies with wider policies. *Policy disadvantages*: it conflates disadvantage and inequality; the focus is still on the poor; measurement can be complex.

3. **Addressing the health gradient**: This goal incorporates the other two; the aim here, additionally, is levelling up health outcomes across the social hierarchy (see Figure 2.2). The aim is to effect the greatest rate of health gain in the lowest social class, the next greatest health gain in the next lowest social class, and so on. It is highly ambitious.
   Policy advantages: it is inclusive of the other two goals and the whole population; it directs attention away from the poorest groups only and towards unequal structures and distribution of power and resources. *Policy*

disadvantages: all of the above advantages can also be cast as the disadvantages because it is very hard from a policy perspective to choose to do this; it is challenging because it means a differential rate of improvement across the social scale with the rate of health gain progressively increasing from the top to the bottom.

Figure 2.2 Life expectancy at birth by social class, men, 1999, England & Wales

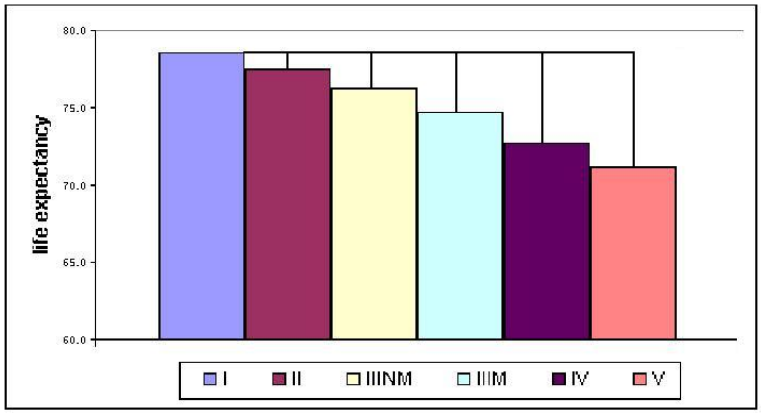


Figure 2.2 shows the increasing shortfall by social class in life expectancy at birth for men in England and Wales in 1999, taking the life expectancy for social class I as the optimum. This is the social gradient in health outcomes; the aim of addressing the social gradient is to level up health outcomes - in this instance life expectancy - for each social class to that of social class I. The figure shows clearly how focussing attention on narrowing the gap in health outcomes between the richest and the poorest groups in society would miss the opportunity to level up health outcomes for the intermediate social groups, so that all people could enjoy the same high standard of health.

If the focus is on reducing the gap, the policy priority is to improve the health of the worst-off at a faster rate than that of the reference group (usually the average or most advantaged group) by reducing risk factor prevalence and improving the level of determinants at a faster rate amongst the worst-off than in the reference group. The difficulty is that the social structure, and the unequal access to resources which it produces, tends to remain unchallenged and therefore unchanged. Unchanged inequalities in people's access to resources may, in turn, work against interventions to tackle risk factors in disadvantaged groups. To reduce health gradients, it would be necessary to reduce the prevalence of risk factors and improve the level of wider health determinants for all groups to match those of the most advantaged. This would require policies to address inequalities in the social structure to level up access to resources for all socioeconomic groups.

Source: Graham (2007), presentation to the meeting

An important point to note is that these 3 approaches are *not* mutually exclusive: the third approach includes the other two. They are linked positions that can be combined.

When considering the types of action required to address the entire health gradient, there is an important distinction to be made between alternative strategies. First, theoretically, the most obvious strategy is to find and employ an intervention that has a *differential* impact across the social groups, where the gradient in effectiveness *increases* as you go down the social gradient so that the greatest effect is experienced in the lowest socioeconomic group, and the least effect is experienced in the highest socioeconomic group. In practice, this type of differential impact is rare. Much more common is the situation where the effectiveness of an intervention *decreases* with decreasing socioeconomic status, as has been found with many blanket health education and personal health promotion interventions. This would have the effect of widening social inequalities in health across society. This highlights the importance of more intensive research efforts to assess differential impacts of policies and interventions, and to identify those that aid progress in the desired direction.

Second, it is important not to discount interventions that have a *uniform* impact across the social gradient. Finn Diderichsen emphasised the important contribution that such interventions can have in reducing the social gradient in health outcomes. This is because, although the same *proportion* of people will benefit from the intervention in each socioeconomic group, the absolute *number* of avoided cases will be higher in the groups starting with the higher incidence (see also Chapter 3, page 21). This is true for interventions that address one risk factor and for those that address more than one risk factor. Where the interventions have a uniform impact on more than one risk factor across the social gradient, absolute inequalities may still decrease. If those risk factors interact synergistically, the reduction in absolute inequalities may be large. A clear message from the discussion on this point was that if we can identify universal interventions (interventions that are applied across the whole of society) that are *equally* effective across the social spectrum, they may have an important part to play in reducing the social gradient in health, more so than just targeting the poor (see **Annex 3**).

On the other hand, there are circumstances in which universal interventions will not be adequate to deal with extreme conditions in the poorest groups. Work in Denmark, for example, has shown the disease burden in the most disadvantaged 5% of the population is very different from the rest of the population (see **Annex 3**). For this group the disease burden is dominated by mental illness and addiction problems:

> *They are poor because they are ill, not only the other way round. It is more a vicious circle of social causes and consequences of these serious mental disorders and addiction problems*. (Finn Diderichsen)

Under these conditions, special interventions would be required to help the poorest groups, over and above the universal policies.

3: What do promising policies and interventions look like? Examples and case studies

Introduction

This chapter draws on specific examples and case studies that were raised at the meeting. The content of this chapter draws heavily on the presentations that were given by Hilary Graham and Margaret Whitehead on tobacco control through an equity lens, Göran Dahlgren on alcohol policies, Joan Benach on employment policies, Dimitri Gugushvili on tackling the medical poverty trap in Georgia, Maciek Godycki-Cwirko on health sector reform in Poland, Aikan Akanov on the impact of unhealthy economic policies in the Central Asian Region (CAR) countries, Tatjana Buzeti on Slovenian regional development, and Tone Poulsson Torgersen on the Norwegian comprehensive strategy to tackle the social gradient. Each case is followed by a short commentary, summarising responses from other participants.

First we asked participants to give their considered opinion on what they thought the main determinants of inequalities in health in their particular country were. The answers varied from country to country, but they all shared an underlying emphasis on differential power and resources. How some of these key determinants are tackled in their differing country contexts are illustrated in the examples that follow.

The case studies and examples reflect two layers of the Rainbow model for the social determinants of health (Figure 1.1). The first group of examples is concerned with the inner layer of the Rainbow: interventions aimed at lifestyle-related factors such as smoking and alcohol consumption. Differences in these behaviours by social group are typically given as the explanation for the social gradient in health outcomes but the reality is much more complex. This chapter explores examples of policy options to tackle these lifestyle-related factors, but through an equity lens.

The second group of examples is concerned with the outermost layer of the Rainbow: specifically healthy or unhealthy macro policies. Examples and case studies are presented on the nature of employment, health sector reform, the health impact of how national income is spent, the influence of the health sector on regional development, and strategies to address the social gradient in health outcomes.

Case studies of interventions to tackle the gradient in tobacco and alcohol consumption

Behavioural risk factors, such as smoking and alcohol misuse, are sometimes portrayed as freely chosen rather than as being influenced by a person's social circumstances. This leads to a strategy of simply informing people about the negative effects on health of different risk factors, so that they are motivated to change their lifestyle – that is, make a healthier choice.

The assumption that the lifestyles of different socioeconomic groups are freely chosen is, however, flawed, as the social and economic environments in which

people live are of critical importance in shaping their lifestyles. Recognizing that lifestyles are structurally determined highlights the importance of structural interventions in reducing social inequalities in diseases related to lifestyle factors. Such interventions include fiscal policies that increase prices of harmful goods and legislation that limits access to these products. Equally important is to make it easier to choose the healthy alternatives – for example, by public subsidies and increased access to healthy food and recreational facilities.

The importance of structural interventions such as these may be far greater among low-income groups than among high-income groups as their effects may be greater in low-income groups. This further reinforces the importance of a combined structural and health education approach for reducing social inequalities in health, as the following case studies illustrate.

CASE STUDY: Viewing tobacco control through an equity lens

The social patterning of tobacco: global commodity and global risk factor

> *The story of cigarettes begins in 1861 when James Bonsack patented a cigarette-making machine that manufactured up to forty times what the best skilled workers could produce by hand. Within a decade, the cost of producing a cigarette was reduced to one-sixth of what it had been. When James Buchanan Duke turned exclusively to machine production in 1885, he quickly saturated the American market. Production was no longer a problem: the only task was to sell.* (Studson, 1993, p.185, cited in Hilary Graham's presentation to the meeting)

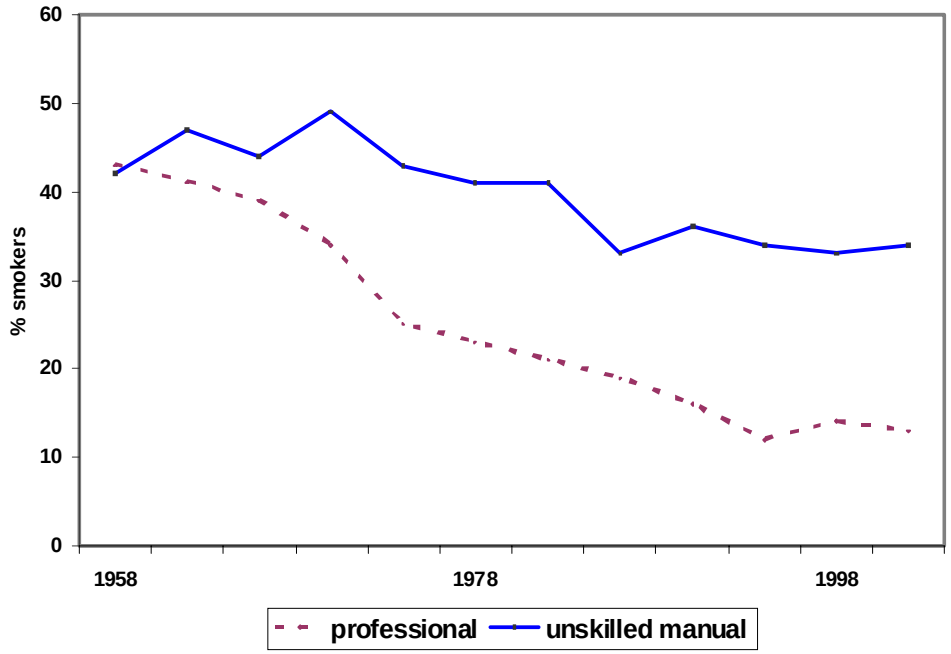
Viewed through an equity lens, tobacco is not merely seen in terms of individual smoking behaviour, but as a mass-produced global commodity, aggressively sold and promoted, which, in the process, has become a global risk factor for mortality.

> *It is par excellence the first and most important commodity that has taken over the world with extraordinary damaging consequences. Smoking is, as we know, the leading factor for mortality worldwide, causing 28% of deaths in high-income countries and 20% globally*. (Hilary Graham)

Shifts in the social pattern of smoking demonstrate clearly that there have been structural forces at work shaping tobacco uptake and use. In industrialised societies young adults in advantaged groups (male, affluent, educated, city living) were the first to take up cigarette smoking, and so smoking cigarettes became a signifier of social distinction. The habit has since been taken up by other groups in stages – first affluent women, then the lower socioeconomic groups - until it has now become a signifier of social disadvantage.

Figure 3.1, below, illustrates these trends, showing changes in smoking prevalence among women with professional jobs compared with women with unskilled manual jobs in Britain in the second half of the 20th century. British women took up smoking later in the century than British men and by the end of the 1950s there were similar rates of smoking amongst women in both the highest and lowest socioeconomic groups. However, smoking rates among women with professional jobs fell dramatically from the mid-1960s onwards, but did not start to fall among women with unskilled manual jobs until the early 1980s and then only slowly. If earlier data were available it would be possible to see the pattern for smoking change from being dominant in the affluent group, to being even between the two groups, to being dominant in the poorer group.

Figure 3.1 % of women smoking cigarettes in highest (professional) & lowest (unskilled manual) socioeconomic groups, Britain, 1958-2000



Source: Graham (2007), presentation to the meeting; adapted from Wald & Nicolaides-Bauman (1991) and ONS (2001)

Low-income countries took up cigarette smoking later in the 20th century than the high-income countries, but, once established, the social trends in uptake are generally following a similar pattern. In some low-income countries, however, there is evidence of higher rates among poorer groups in the early stages of the tobacco epidemic, illustrated by a recent study in Malawi:

> *Male tobacco users tend to be less educated, urban, household service or manual workers. Although tobacco use is less common among women, it relates inversely to their education and occupational status. Tobacco users more often reported drinking, getting drunk, and, among men, paying for sex.* (Pampel, 2005, p.1009)

In these countries, the tobacco epidemic may be leapfrogging the more affluent groups and affecting the most disadvantaged groups first.

The effects of tobacco on the social gradient through an equity lens

The current situation we see in many countries is of higher prevalence, greater dependence and lower cessation rates among poorer groups. Viewed from a life course perspective, social disadvantage interacts with tobacco dependence in several ways. Childhood disadvantage increases the risk of growing up a regular smoker and as a heavy smoker. Both social disadvantage and tobacco dependence reduce the odds of quitting in adulthood. Table 3.1 illustrates that the chances of being a current smoker in adulthood increase with increasing aspects of disadvantage over the life course, while, conversely, the chances of becoming an ex-smoker reduce with each successive layer of disadvantage. This illustrates more than anything that

tobacco control policies need to address the social disadvantage and inequalities in people's lives as well as their smoking habits.

Table 3.1 Disadvantaged trajectories & women's smoking status, England, 2000

	Current smoker (%)	*Ex-smoker (%)*
childhood disadvantage	36	30
+ left school ≤ 16 years	44	28
+ mother ≤ 21 years	55	22
+ adult disadvantage	63	17
none of these	18	45

Source: Graham (2007), presentation to the meeting

Tobacco control policies through an equity lens

Tobacco control policies can address the observed social patterning of cigarette smoking through three main approaches: interventions focussed on individuals, wider tobacco control policies, or interventions addressing social disadvantage and social inequalities more generally. They have varying chances of success in reducing social inequalities in smoking.

First, with interventions focussed on individuals, such as health education and personal counselling to quit smoking, the dominant pattern is that these interventions are more effective among more advantaged groups. The inverse equity hypothesis can be applied here, summed up by Hilary Graham,

> *Namely, that if you just sprinkle a bit of knowledge across the population then better-off groups will access it and use it and poorer groups won't.* (Hilary Graham)

So, if offered in a blanket fashion, across the whole population, such interventions can have the effect of widening social inequalities in smoking as they encourage more affluent smokers to give up while doing little for the more disadvantaged ones. There have been some promising results, however, from very specific, targeted outreach services in this category. England's smoking cessation clinics, for example, like cessation interventions elsewhere, generally achieve higher abstinence rates with better-off smokers. However, some cessation services that have made extra, intensive efforts to reach and treat smokers living in the most disadvantaged areas in the country have managed to achieve higher use of such services in these disadvantaged areas than achieved in the population as a whole. This meant that the services were reaching deprived smokers more effectively even than more affluent smokers. The evaluators concluded that if improved access to support for smokers living in the poorest communities were extended, sustained and translated into long-term quit rates, then smoking cessation services had the potential to make a useful contribution to addressing the social gradient in smoking (Raw et al, 2005; Ferguson et al, 2005).

Second, interventions that fall into the category of "wider tobacco control policies" include fiscal measures to control the price of tobacco goods; and legal measures to

protect people from tobacco exposure in workplaces and public spaces; to restrict/ban advertising, promotion and sponsorship of tobacco; and to prohibit tobacco sales to minors. The WHO Framework Convention on Tobacco Control goes wider still, to include restrictions on the production and distribution of tobacco by various measures. This was developed as a response to the globalisation of the tobacco epidemic and will be an increasing focus for efforts in many countries.

> *We always have to consider the causes of the causes, and that smoking is structurally determined. Because of that it is very important to do something about the supply side of the equation. And … the absence of these wider policies that focus on supply may very well have led to the widening of inequalities in smoking*. (Margaret Whitehead)

Although there is little or no evidence of a differential effect of wider control on different socioeconomic groups (mainly because they have not been evaluated for differential effect), there is a key conceptual and technical issue concerning their potential importance when viewed through an equity lens. The point is that even if the impact of one of these tobacco control policies on smoking rates is of the same magnitude for each socioeconomic group (i.e. has a similar *proportional* effect); it may still bring about a reduction in *absolute* inequalities in uptake and prevalence (see also Chapter 2, page 16). The numbers in Table 3.2 illustrate this point. If a specific intervention achieves a 25% reduction in smoking prevalence in both the poorest and the best-off group, the inequality in prevalence in *absolute* terms reduces from 20 per 100 pre-intervention to 15 per 100 post-intervention.

Table 3.2 Reducing the gap in smoking prevalence between the richest and poorest socioeconomic groups

	Smoking prevalence before intervention	Smoking prevalence after intervention
Poorest group	40 per 100	30 per 100
Best-off group	20 per 100	15 per 100

Source: Adapted from Graham (2007), presentation to the meeting

It has been speculated that the reliance on interventions targeted at individuals, and the relative absence of wider tobacco control policies (at least until very recently) may have contributed to the widening of inequalities in smoking in countries such as the UK.

Third, interventions that address social inequalities in society may have an important part to play in relation to the tobacco epidemic. Social inequalities are widening in many countries and at a global level, and may act as a barrier to tackling smoking inequalities. Conversely, however, we have very little empirical evidence from evaluations of how improved socioeconomic trajectories and socioeconomic circumstances influence risks of uptake, dependence or persistence of smoking. What evidence there is comes from targeted interventions of multiple-disadvantaged groups with short-term follow up. A welfare-to-work programme in the US, for example, trying to get single mothers into the labour market, had some success in

improving their financial situation but smoking rates actually went up. Another study in the UK , looking at welfare reform and low-income mothers suggested that improved circumstances was associated with higher quit rates for those who were less disadvantaged, but it had no effect in more disadvantaged groups. This evidence reinforces the importance of reducing social inequalities through embedded, universal policies and across the life course. There are no quick fixes.

Commentary:

So, what would promising policies and interventions to reduce the social gradient in smoking look like? They would combine a full range of the wider tobacco control policies set out in the WHO Framework Convention on Tobacco Control, with extra efforts to reach and help more disadvantage smokers to quit smoking, at the same time as measures to improve their socioeconomic circumstances. There are examples of countries moving in this direction, though none has implemented the full spectrum of actions. In the last 5 years, the UK, for example, has intensified efforts to implement population-wide tobacco control policies (particularly on restrictions to smoking in public places and sales to minors) and has made systematic attempts to provide customised cessation services to disadvantaged smokers, free under the NHS. It could be argued that the latter are the most intensive and purposeful attempts so far on a country-wide scale to improve economic, geographic and cultural access to such services. At the same time, however, the country is working against a backdrop of widening differences in socioeconomic circumstances, and participants were keen to emphasise the upstream factors that lead people to smoke in the first place:

> *It would be a very small step along the way, but might be* [helpful]*, if we stopped calling tobacco the leading cause of death and started calling the upstream factors the leading cause of death*. (Alan Shiell)

For it to be the global commodity that it is there has to be a huge production process behind it. Those that work in the tobacco production industry are poor farmers and low-paid, unskilled manual workers. Therefore, introducing wider control measures will have consequences for labour markets in the producing countries, further demonstrating the complexity of this as an issue for global health.

> *…it is poor people who are growing the tobacco, in the main, and working as unskilled manual workers in the tobacco production industry. So these wider control measures have to understand that part of the multiplicity of the issue is that if we manage to control this industry then we've got problems in the labour market consequences for poor farmers and low-income, low paid workers.* (Jennie Popay)

CASE STUDY: Alcohol misuse policies through an equity lens

Just as with tobacco, the issue of alcohol as seen through an equity lens, has to be set in its broader societal context - beyond the behaviour of individual drinkers - to include the behaviour of corporations and the role played by governments. Likewise, action needs to go wider than individual educational initiatives, to encompass a range of public policies to control supply and demand through legal and fiscal

measures. This example touches on the potential differential impact of some of these wider alcohol policies.

The social pattern of alcohol consumption

In Europe, the social pattern of alcohol consumption varies: it is a complex picture and differs also by gender. Overall, there tends to be a social gradient relating to alcohol consumption with higher levels of consumption among men in lower socioeconomic groups. This is the case in Portugal, Ireland and Greece, but is not the case in Denmark where more alcohol is consumed by the higher socioeconomic groups. In Finland, alcohol-related mortality accounts for 24% of the social difference in life expectancy. Increasing numbers of countries in the centre and east of the WHO European Region are reporting acute problems with alcohol too.

The double-negative effect of alcohol consumption: Sweden

There is also a differential impact in terms of the health consequences of drinking for different social classes. In Sweden, research has shown that the damage from alcohol is 2 to 3 times higher among manual workers compared to civil servants at the same level of excessive alcohol consumption. This is thought to be due partly to differences in drinking culture, with levels of binge drinking higher amongst lower socioeconomic groups. This not only has a more detrimental effect on the body, but also increases the risk of accidents and injuries as well as the social consequences of drunkenness, such as violence and risk-taking behaviour. The chances of having a work-related accident are also higher among manual workers who have consumed alcohol due to the nature of their work, such as operating machinery.

Social networks are also thought to play an important role. A professional with an alcohol problem may be encouraged to seek help by family members. Workplaces may have policies that support white-collar employees with alcohol addictions to get treatment. However, a working class person who goes to work drunk is more likely to be dismissed from their job. They then face a cycle of unemployment, economic stress, increased social problems, which could in turn reinforce alcohol dependence. Thus, alcohol consumption tends to have a more damaging health and social effect on poorer groups, further widening inequalities.

Equity-oriented alcohol policies

Policies that reduce alcohol consumption are important alongside reducing other societal factors that create the conditions for alcohol dependence. Limiting access to, and increasing the price of, alcohol are the most effective. In the mid-1990s, Sweden had one of the lowest levels of alcohol-related disease and injuries in Western Europe at the same time as having restricted access and high tax on alcohol. Norway also has one of the most restrictive alcohol policies in Europe and has the lowest alcohol consumption in the Western world.

CASE STUDY: CZECH REPUBLIC

In the Czech Republic, excessive drinking has been recognised as a very serious problem. A survey conducted in 2004, "*The sample survey of the health status and lifestyle of the population of the Czech Republic*", revealed high levels of alcohol consumption amongst both men and women, but especially among young people. The survey also found that there was a greater appreciation of the potential risks and consequences of drinking amongst women and people with a high level of education, and that this recognition increased with age.

In 2002 the government of the Czech Republic adopted a policy entitled "*The Long-term program for improving the health of the Czech population*". This policy had been developed by the Ministry of Health, but in close co-operation with other government sectors. The policy document set a target to limit per capita alcohol consumption to six litres a year, and achieve zero alcohol consumption for the under 15 year olds. The document includes 12 actions to achieve these targets, including:

- Setting up a body to monitor consumption and undertake further research, feeding into the European alcohol plan.
- Using taxation to encourage people to choose alcohol free drinks.
- Health promotion activities with high-risk groups, such as children and young people, and people in high-risk professions such as health workers and construction workers.
- Activities aimed at stopping people driving under the influence of alcohol.
- Banning direct and indirect advertising of alcohol at sports and cultural events.
- Providing work-based alcohol testing to high-risk professions, such as people working in the power generation and chemical industries.

Despite the good intentions laid out in the policy document, progress at a national level has been slow. Possibly it was too ambitious, but there have also been factors that have been working against its success. For example, the alcohol lobby has succeeded in preventing the government from increasing taxes on alcohol. Collaboration at the national level to achieve these goals has been limited. In contrast there has been much greater success at the local level, such as through the work of the national network for workplace health promotion that includes alcohol reduction strategies. Similar strategies have been initiated by the national network of healthy cities, which is a very popular movement in the country at the municipality level, also focused on health promotion issues.

There are, however, marked negative effects of economic policies related to alcohol underway in Europe that have already made matters worse for many countries. Existing EU policies are driving an increase in social inequalities in alcohol-related disease, as well as overall mortality. To illustrate this point, Göran Dahlgren shared the following information: European Union policies are forcing Sweden to liberalize

import restrictions and consider lowering its taxes on alcohol. It has been estimated that if taxes were lowered by 40% on hard liquor and 15% on wine, this would lead to an increase in 1.6 million days lost to sickness per year in Sweden. If, on the other hand, alternative policies were adopted that restricted alcohol and raised its price, then there are substantial potential gains. It has been estimated, for example, that an increase in alcohol taxation of 10% in the 15 countries that belonged to the EU prior to May 2004 (EU-15) would save 9,000 deaths per year; if we had a ban on advertising we would save 200,000 years of disability and premature death across the EU-15. If we provided active support through primary care to 25% of those at risk in the EU-15 we could save 400,000 years of disability and premature death.

Commentary:

Current EU alcohol policies that favour the commercial interests of the alcohol industry increase social inequalities and overall mortality. Similarly in many central and eastern European countries, the powerful alcohol lobby has succeeded in preventing governments from adopting wider alcohol control policies. Denmark has a huge multinational alcohol industry which has had its effect on alcohol-related disease, alcohol being one of the main factors contributing to the excess disease burden in the country. Price elasticity is higher in poorer groups, so pricing policies are of critical importance for reducing the social inequalities in health that are compounded by alcohol consumption. Whilst the alcohol industry remains so powerful in countries such as Denmark, the effectiveness of behavioural health promotion interventions will be limited there.

Case studies of healthy and unhealthy macro-policies

The driving forces that generate social inequalities in health are, to a great extent, related to the macro-policy environment, in the outermost layer of the "Rainbow" model. This environment includes neo-liberal economic growth strategies, which have widened income inequalities and increased poverty. The increasing globalization of national economies has reduced the possibilities for national governments to influence these trends. At the same time, the actions of major players on the financial markets are of increasing importance – not only on these markets, but also on economic and social development in general (Dahlgren and Whitehead, 2007).

From an equity-in-health perspective, this situation calls for intensified efforts to identify and, whenever possible, quantify the effects of different economic growth strategies, income inequalities and poverty on the health of different socioeconomic groups. This section presents examples of healthy and unhealthy policies through case studies on employment, health sector reform, the contribution of the health sector to regional development, and a national strategy to reduce the social gradient in health status.

Employment conditions as a determinant of social inequalities in health

Employment conditions are key social determinants of health inequalities and employment was classed as one of the three most important determinants in their own countries by participants from Sweden, Slovenia and Spain. There are a number of different, but inter-related, factors that link employment conditions and inequalities in health; such as:

- The gradient in the risk of unemployment and participation in the labour market,
- The gradient in poor physical working conditions in the work environment, and
- The gradient in employment relations underpinned by power relations between the state, employers and employees.

Unemployment and policies to encourage participation in the labour market

Unemployment causes deterioration in health and premature death through several mechanisms. These include increased poverty from loss of earnings, social exclusion and the resulting isolation from social support, and an increase in health-damaging behaviours. In most European countries, those at risk of being unemployed are people with the least education, unskilled workers, lone mothers, ethnic minorities and recent immigrants.

CASE STUDY: ENGLAND: "Welfare-to-work" strategies

England is an example of a country that sees employment as a crucial component to its poverty alleviation policies. One example of a 'welfare-to-work' policy in England and Wales is the New Deal for Lone Mothers, which provides advice to unemployed single mothers about training opportunities and ways of overcoming barriers to accessing the labour market. It is seen by the government as one of the ways of alleviating child poverty in the UK.

Social protection strategies also need to be in place to prevent the unemployed from falling into poverty. Developing strategies that support the unemployed, both in terms of their health and being able to get back into work are necessary. The health sector could have a role to play here in terms of helping the unemployed with their health problems, be they mental health problems or other chronic illnesses. The Condition Management Programme (CMP) is being piloted in parts of England. It focuses on improving the cardio-vascular, musculoskeletal and mental health problems of Incapacity Benefit claimants, by tackling issues such as anxiety, pain management and low confidence.

The work environment

The work environment itself affects different occupational groups unequally. The lower the occupational class, the more likely people are to experience hazardous

work conditions, including physical strain, low job control, greater noise and air pollution, shift work, a monotonous job and a hectic work pace. In her presentation to the meeting, Margaret Whitehead outlined the ways in which this occurs and some strategies for improving the work environment (see Dahlgren and Whitehead, 2007 for a fuller discussion). They are:

- Removing physical health hazards at work. Historically, in industrialised countries, this has been tremendously important in reducing inequalities in health. But there are still areas where there could be more improvement, for example, interventions to reduce the musculoskeletal problems that are common in today's workplaces.
- Improving psychosocial working conditions. Those in low income, low regulated workplaces suffer the poorest psychosocial conditions. So tackling psychosocial conditions in the workplace has potential to tackle inequalities in health.
- Strengthening legislation to promote healthy workplaces.
- Developing the workplace as a setting for health promotion.

Employment and employment relations

Important components of employment relations are the distribution of power between employers and employees, and the level of social protection that employees can count on if they are sick or become unemployed. There is emerging evidence of the impact of employment relations on population health. Understanding of the ways in which employment relations impact on health inequalities is still being developed and has been a focus of the WHO Commission on the Social Determinants of Health Employment Conditions Knowledge Network (EMCONET). Their findings suggest that the quality of employment and employment relations that people experience is socially stratified in terms of gender, race and social class (Benach, Muntaner and Santana, 2007).

The EMCONET report identifies several classifications of employment conditions globally: full-time permanent employment, unemployment, precarious employment, informal employment, child labour and slavery/bonded labour (Benach, Muntaner and Santana, 2007). In Europe, over the last few decades, the labour market has become increasingly 'flexible' leading to a growing number of precarious jobs. Precarious employment is where work can be short-term, part-time, unregulated and where workers are unprotected by labour laws (for more on this see Benach and Muntaner, 2007). Social movements, civil society associations that favour fair employment, unions and safety representatives will be important agents in the protection of the health of those adversely affected by precarious employment.

Social movements could include consumer boycotts and campaigns to pressure industry and governments into taking action to end abuses of employment practices. Whilst many businesses have embraced the label of 'Corporate Social Responsibility' (CSR), this tends to be poorly regulated and monitored and its effectiveness limited, primarily because this is a voluntary code of conduct without independent

assessment. Whilst voluntary policies like CSR have a place, they do not tackle the underlying structural causes of employment inequality operating within the global and national economies, and are not a substitute for mandated standards in employment relations (Benach, Muntaner and Santana, 2007).

Commentary:

The trend in many developed countries is to have policies that reduce dependency on welfare benefits in favour of working. However, it cannot be assumed that being in work is enough to improve health. The quality and nature of the employment is also important to health and wellbeing. Where there is compulsion to work, or conditions on benefits that force people to take any job, there could be potentially health-damaging effects with these policies. Evidence suggests that fair, permanent and full-time employment is associated with better health outcomes. If governments promote this in their employment policies, along with national and international law enforcements of fair employment standards, this would play an important role in reducing social inequalities in health.

Norway's strategy to reduce social inequalities in health outlines a number of policy instruments in place to meet its objective of having an inclusive working life and healthy working environment. These include:

- Targeting inspection activities at high-risk industries (identified as health and social services, transportation and cleaning services) and groups (such as immigrants);
- Making arrangements to ensure that enterprises fulfil their responsibilities regarding prevention and adaptation of workplaces to a greater extent;
- Developing an action plan to combat social dumping. Social dumping refers to the practice of manufacturing a product in a country with weak or poorly enforced labour standards for export to a country with stronger labour standards. This artificially lowers the cost of the product in the country into which it is imported, creating a competitive advantage. However, it could have potentially negative effects on social and workplace conditions in the country of manufacture.

(Norwegian Ministry of Health and Care Services, 2007, pp.45-49)

Examples of healthy and unhealthy economic policies

All the participants agreed that there needs to be much more emphasis on assessing the health impact of economic policies, and where the burden of impact falls across the population. Göran Dahlgren has highlighted the importance of doing this by distinguishing between what he calls "healthy" economic policies and "unhealthy" economic policies (Dahlgren, 2000).

> *Healthy economic policies are those that use the resources generated from economic development to invest in raising the living standards of low-income groups and in public systems for health, education, and other essentials such as food security. Remarkable progress in population health has been achieved under such conditions, even in fairly poor countries. Unhealthy economic policies, by contract, use the fruits of economic development to line the pockets of already affluent*

groups, while reducing social spending and social protection for less privileged groups, deregulating markets, cutting taxes, and privatising public goods. These so-called neo-liberal policies have acted as a drag on improvements in population health and wellbeing, and have even been the cause of decline in some countries. (Whitehead, 2008, p.1155).

The following case studies from national and regional levels illustrate a continual struggle between healthy and unhealthy economic policies, even in the same country, and how difficult it is to reverse the impact of unhealthy macro-policies once they have taken hold.

CASE STUDY: GEORGIA: THE CREATION AND AMELIORATION OF A MEDICAL POVERTY TRAP

Georgia has been undergoing a transition to a market economy that has involved classic neo-liberal policies for all sectors, including the health sector. The country provides an interesting example of a health care system that is both generating poverty – a "medical poverty trap" (Whitehead et al, 2001) - and is trying to do something about improving economic access to services with an initiative targeted at the poor.

Georgia has a population of 4.4 million people and currently has a high economic growth rate of over 9%, however approximately one third of the population is living in poverty (Dimitri Gugushvili, presentation to the meeting). Table 3.3 presents further statistics describing the challenges faced by those looking to reform the health sector in Georgia.

Table 3.3 Selected health-related statistics - Georgia

	Georgia (2005)	**European Region (2005)**
% Unemployed	13.8	9.29
Infant deaths per 1000 live births	19.7	8.15
Maternal deaths per 100,000 live births	23.39	14.5
Total health expenditure - % of GDP	8.6	7.74
Total health expenditure – purchasing power parity ($) per capita	318	1747.8
Public health expenditure as a % of total health expenditure	19.5	68.48

Source: WHO/EU (2007)

The last item in Table 3.3 means that in 2005 approximately 80% of spending on health care in Georgia came from patients themselves, mainly through out-of-pocket payments, which is an exceedingly high level and one that is unsustainable in the long-run. Overall, the level of any public or private sector form of pooled funding is very low and health care expenses are high relative to income. In 2005 a household survey found that average hospitalisation costs equated to nearly three times the average monthly income of a typical poor household. The absence of a universal

system of risk sharing means that even those above the poverty line could be pushed into poverty following an episode of illness.

Most recently, the government has stated that full population access to health care is a key objective of both health and social reform. As a consequence, the *Medical Assistance Programme for Populations below the Poverty Line* was launched in 2006. The programme provides cover for urgent and planned out-patient and in-patient services and currently covers 650,000 people out of a population of 4.4 million. It also covers the beneficiary's share in other disease specific state programmes. This programme has been introduced alongside a programme of means-tested social assistance which is replacing the Soviet-style category based system. The system has assessed 464,800 applications for social assistance; the beneficiaries for the medical assistance program are identified from these applications.

> *The important issue is eligibility; how we define the poor. We have political will, we have funds allocated, but how do we actually reach those people? This is where the health and social sector collaborated quite closely: the Ministry of Labour, Health and Social Affairs has a database of socially vulnerable families which is used for means-tested social assistance … each of the households is assigned a particular score. The households with a score below 70,000 were eligible for participation in the programme. The ones with a score below 57,000 also received cash benefits. In two regions the local governments also financed households with scores between 70,000 and 100,000*. (Dimitri Gugushvili)

Beneficiaries who need outpatient, maternity or emergency services, can attend at any contracted provider and receive these services for free, with the State United Social Insurance Fund (SUSIF) reimbursing the provider on a fee for service basis. For planned hospital care, the referring doctor applies to SUSIF and the patient is put on a waiting list whilst SUSIF identifies a provider for the treatment. Waiting times are on average 1-3 months. In this first phase of the programme services are being purchased directly from service providers by (SUSIF), except for two pilot regions where SUSIF is purchasing the insurance package from private insurance companies.

The programme has only been in place for one year so it is too early to assess its wider impact. In the first eleven months the programme covered 30,062 cases of urgent hospital services, 17,828 cases of planned hospital services and 31,249 baby deliveries. This last is especially important as in rural areas poor women have had to deliver their babies without professional help, and this has contributed to the high rate of infant mortality. Data from the household income survey on health expenditure show that 64% of the programme beneficiaries consulted health care providers and 76% of them purchased medication.

> *More importantly, 74% of all people who have some type of medical insurance are the beneficiaries of our programme. So it shows that* [even when] *medical insurance* [is available it] *is not widely used in Georgia. Instead, out-of-pocket payments constitute a regular way of paying for health care*. (Dimitri Gugushvili)

In the next year the plan is to increase the coverage of the programme, with a target of including 1.1 million people, the services will be purchased directly from insurance companies which, it is hoped, will make it easier to administer, and the costs of medication will be covered to ensure that people benefit fully from the programme.

Commentary:

From the perspective of tackling the social determinants of inequalities in health, the Georgian case raises some highly relevant issues. On the one hand, the Government has recognised that out-of-pocket payments for health care in the Georgian system can become catastrophic for poor people and has responded by a serious effort to pay for or waive fees for the poorest sixth of the population for selected care. It is tackling two key determinants of inequalities in health (reduced access to effective health care and poverty itself) by a programme focussing exclusively on the disadvantaged (Hilary Graham's first approach of her three-category typology). On the other hand, the policy initiative does not tackle the aspects of the health care system that are generating high out-of-pocket expenses in the first place, and does nothing for the population in the middle and above, who still need health services but face prohibitive costs for health care, sometimes dragging them down into poverty. Of course, extending the assistance programme to a greater proportion of the middle-income population will help, but it will not solve the underlying cause, which would require reform of the system as a whole to make it more equitable.

CASE STUDY: POLAND: MEDICAL ENTREPRENEURS RATHER THAN THE PUBLIC GOOD

In 2006 the Polish government achieved an economic surplus at the end of the financial year, helped by European funding and money sent home by Poles working overseas. However, although the Polish economy has been growing by approximately 6% per year, levels of public funding for health care have not kept pace with this growth in GDP, remaining fairly constant at around 4% of GDP in recent years (Kuszewski and Gericke, 2005). This has limited the capacity for Poland to develop a coherent health care system.

A system of compulsory health insurance was introduced in Poland in 1999 and provides near universal coverage of the population. This has been managed by the National Health Fund (NHF) since 2003. The NHF collects premiums and contracts providers to provide health care services for all people who contribute to the fund. The NHF is independent of the government and contracts are predominantly provided through competitive tendering. In recent years there has been an increase in the share of contracts for primary health care services and dental health care services that have gone to private providers (Kuszewski and Gericke, 2005). The number of hospitals under private ownership remains low and the majority of contracts for hospital care are with public providers.

The main strategy for health care in Poland has been set out in the National Health Programme, and the medical profession is regulated through the self governing organisation of physicians and dentists (Kuszewski and Gericke, 2005). There have been problems, however, with the planning and regulation of the health system and health care professionals. The increased involvement of the private sector has meant that medical specialists perceive themselves as entrepreneurs, interested in making a profit, rather than as service providers.

> *If the doctor is perceived as an entrepreneur – a seller, a provider, not as a physician – it is very risky for the patient to go and see such a doctor, they may be trapped by this.* (Maciek Godycki-Cwirko)

Limits in the volume of health services purchased through the NHF branches means that access to health services is in practice quite limited, resulting in long waiting lists. Unlimited patient choice for specialist services creates confusion for patients because they do not know where to go or what to choose from.

Although a recent law required the NHF to make data from waiting lists accessible to the public at large (Kuszewski and Gericke, 2005), patients are not yet able to use this information in making choices. There is also a lack of communication between specialists and primary care physicians, a shortage of trained general practitioners, inadequate record keeping, duplication of prescribing and overbooking in hospitals.

In 2004 28% of health care expenditure was from out-of-pocket payments from private households. The pattern of these payments reflects the difficulties people have in accessing certain categories of health services in the public sector, as well as the perceived low quality of "free of charge" services provided by the public sector (e.g. long queues, long waiting lists, lack of specialists, limited referrals to specialists) (Kuszewski and Gericke, 2005).

More research is needed into inequalities and patient safety, and more account needs to be taken of stakeholders needs and the power differentials in society. It is hoped that international research will be able to inform policy development.

> *This is the main hope that we will provide decision makers and policy makers with solid data and research experience we will bring from outside, hopefully using Norwegian experience, English experience, Canadian probably, and others. ... So, we need to discuss values which our global partners consider. Monitor what's going on. These are things to be done, and these things have to be done in the context of this Rainbow* [Figure 1.1]. (Maciek Godycki-Cwirko).

Commentary:

The Polish case illustrates a very common pattern in health sector reforms worldwide. During the first phases of transition to market economies, widespread privatisation and commercialisation of the health sector (mirroring the wider economic reforms in the country) introduces profit-making and entrepreneurial ethos into the system, overriding equity principles. Highly inequitable out-of-pocket payments increase, stimulated both by the breakdown of public risk pooling arrangements and a decrease in government investment in public services, which then decline in quality to such an extent that patients go elsewhere. In the Polish case, the problems that this state of affairs created were recognised and in 1999 a system of compulsory health insurance and universal coverage (at least on paper) was introduced. Crippling damage to the system, however, had already been done, including a decline in trust in the medical profession with the change in ethos, problems with planning and regulating the system. All this requires tremendous efforts to put right – much more than it took to dismantle.

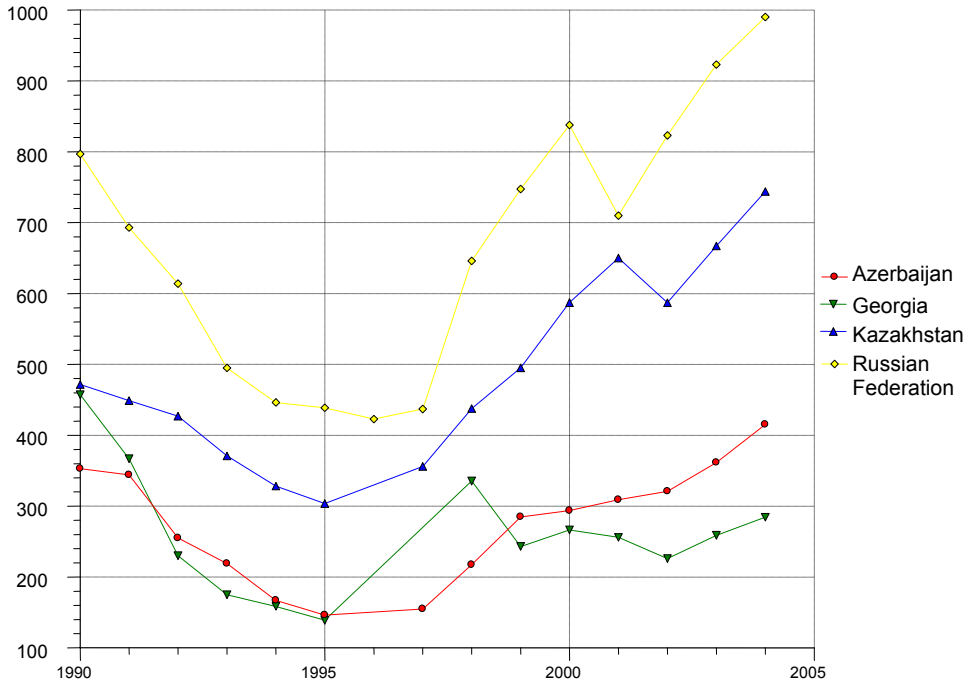
CASE STUDY: KAZAKHSTAN AND THE CENTRAL ASIA REGION (CAR) COUNTRIES: WHERE ARE THE FRUITS OF ECONOMIC GROWTH INVESTED?

The last 15 to 16 years have seen tremendous shifts in the countries of the former Soviet Union countries. During this time, many of these countries have experienced high rates of economic growth, for instance Kazakhstan has had a growth in GDP of 10% per year and Azerbaijan has had a growth of 25% in GDP per annum (Aikan Akanov, presentation to the meeting and Figure 3.2).

At the same time these countries have had to develop new economic and social systems. There has been a large loss of human resources and there has been very little investment in health: in 2004 the WHO estimates for the total investment in health care as a percentage of GDP were: 8.7% in EU countries; 3.8% in Kazakhstan, 5.6% in Kyrgyzstan, 4.4% in Tajikistan, and 5.1% in Uzbekistan (WHO/EU, 2007).

This lack of investment in the needs of the population and in health care during a period of sustained economic growth is reflected in low life expectancy at birth in all CAR countries: 65.9 years in Kazakhstan, 67.7 in Kyrgyzstan, 73.7 in Tajikistan, and 70.5 in Uzbekistan in comparison with 78.5 across all EU countries in 2005 (WHO/EU, 2007).

Figure 3.2 Changes in real GDP, PPP$ per capita, for selected post-Soviet countries, 1990-2004



Source: WHO/EU (2007)

Of particular concern are high rates of maternal and infant mortality in CAR countries compared to EU countries, largely reflecting poorer access and treatment in primary care. Kazakhstan also has twice the rate of mental health disorders when

compared to the other four CAR countries. High rates of suicide contributed to death rates for 15-19 year olds that were twice as high as the average for that age group amongst other transition economies in 2004 (Aikan Akanov, presentation to the meeting).

It is clear that CAR countries have faced serious problems in the transition period. Although there have been high rates of economic growth, this income has not been invested in addressing the key determinants of health, service standards, programmes to address specific health conditions or support for vulnerable groups. Even where policies to protect vulnerable groups have been introduced they have focused on improving physical health and have not considered the broader determinants impacting on the psychosocial and material needs of people, such as programmes aimed at supporting families with young children and reducing material and financial insecurity. They have therefore ignored the most important social justice issues facing modern societies.

> *During the Soviet time … we could not talk about inequalities in health politically because everything at that time was equal. After the collapse of the Soviet Union, in the last 15 years, we have been looking at a different picture – with high poverty levels and unemployment*. (Amiran Gamkrelidze)

> *… the transitory period influenced very negatively on population health and wellbeing. I think not only in Central Asia, but in all post-Soviet countries. So, during this period the most powerful determinants of health standards were ignored*. (Aikan Akanov)

> *It's very difficult to advocate* [for health investment] *in transition countries because the economic and political priorities are seen as more important.* (Aikan Akanov)

> *…if you will look at the budgets of the former Soviet Union countries, you will see the only items in the budget are: defence, education, health. In every post-Soviet Union country, except the Baltics, the military or defence budget is 3 or 4 times more than the health budget. So, despite the fact that economic development is very high (25% in Azerbaijan, we have also 10% in our country (Georgia)), health is a lower priority.* (Amiran Gamkrelidze)

Commentary:

If the CAR countries are experiencing unhealthy economic policies and a lack of priority given to tackling the social determinants of health, then the big challenge is how to raise awareness among all sections of society to turn around the situation. It seems ironic, given the recent developments described above, that Kazakhstan was the site of the groundbreaking WHO Alma Ata declaration thirty years ago, calling on the world to embrace the equity principles of Health for All and primary health care in its widest sense. Participants suggested that this could be a good mobilising point for stimulating renewed interest among policy makers in moving towards more equitable systems in CAR countries.

Regional development strategies

CASE STUDY: SLOVENIA: REGIONAL DEVELOPMENT WITH A FOCUS ON HEALTH IMPROVEMENT

Slovenia gained its independence in 1991 and since then has experienced considerable economic growth, whilst maintaining a commitment to social cohesion and environmental sustainability (Buzeti and Maučec Zakotnik, 2008). Slovenia has

12 administrative regions with regional development agencies co-ordinating regional planning; these regions cover multiple municipal governments, but are not themselves political organisations. There is a public health system in Slovenia, financed mainly through compulsory state health insurance, which accounts for 80% of the total health expenditure. This insurance provides complete coverage of health care costs for young children, school children and for specific diseases and conditions (Slovenia Government Communication Office, 2007). Beyond these specific groups and conditions, individuals are required to pay a contribution towards the cost of services. These additional costs are covered by out-of-pocket payments or through additional voluntary health insurance. Primary care is administered at the municipal level, whilst the rest of health care is administered by the national Ministry of Health (MoH). There is a national Institute of Public Health and each region also has an institute of public health, responsible for communicable diseases, health statistics and research, environmental health and health promotion (Buzeti and Maučec Zakotnik, 2008).

By 2000 it was apparent that there were growing regional differences in social, economic and health development, as in other countries in Europe. In preparation for Slovenia's accession to the EU in 2004, the Slovenian Government increased its attention to, and investment in, regional development. National government agencies co-operated with regional development agencies to design and implement regional development plans. This requirement to draw up regional development plans provided an opportunity for inter-sectoral work at the regional level. These regional development plans were the basis for local authority financing and included social, economic and environmental issues. At this stage no health targets were included in these plans, although demographic and health indicators had been used to highlight inequalities.

In 2001 a national survey on lifestyle and health revealed large regional differences in health and lifestyle indicators. This survey provided clear evidence of the links between socioeconomic status and health outcomes. This proved to be a good tool for arguing that the health sector at the regional level should promote conditions for good health:

> *This entailed promoting healthier lifestyles and, at the same time, demonstrating how improved health is a resource for development in the region and how development is a resource for better health*. (Buzeti and Maučec Zakotnik, 2008, p.30)

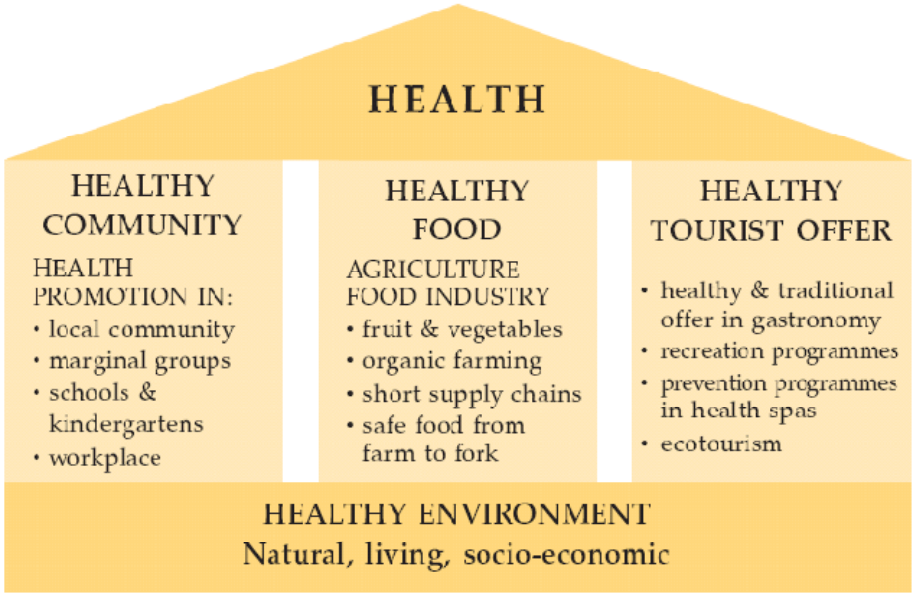
The WHO European Office for Investment in Health and Development in Venice provided technical support and assistance. This set the context for Slovenia to request an Investment for Health appraisal. At this time the Public Health sector of the MoH in Slovenia started to raise awareness about the socioeconomic determinants of health and the need to address inequalities in health. All these conditions came together to create an opportunity to pilot strategies for Investment in Health and Development in the Pomurje region in Slovenia (Buzeti and Maučec Zakotnik, 2008).

The Pomurje region is in the north east of Slovenia and has 27 municipalities. Compared to Slovenia as a whole it fares less well in terms of higher education

attainment, employment and economic performance, and has a higher proportion of the population on welfare benefits. In 2003 there was a 1.5 year difference in life expectancy for women compared with the national average (almost 3 years lower than in the region with the highest female life expectancy) and a 3 year difference for men compared with the national average (4.8 years lower than the region with the highest male life expectancy). The main economic activity in the region is agriculture and accounts for 13.4% of the regional GDP; more than half the households in Pomurje are connected in some way with agriculture (Buzeti and Maučec Zakotnik, 2008).

The MoH took a stewardship role in developing this regional pilot programme. It took the approach that it should be achieved through joint action to improve health. The regional development agency was given ownership of the strategy. The regional public health institute acted as a facilitator to help bring together many different organisations to develop and implement the plan. Regional targets were synchronised with national targets during the development phase. Policy development followed from experience gathered in the field, supported at the national level.

Figure 3.3 Pomurje pilot structure (Programme MURA)



Source: Buzeti and Maučec Zakotnik (2008, p.42); reproduced with permission

Figure 3.3 describes the different strands of the pilot programme. The 'Healthy Environment' foundation included improvements to water provision and access to higher education, recognising that better education leads to improved employment opportunities and that both of these are key determinants of health.

As agriculture is so important to the region, efforts were made to ensure its sustainability. A Health Impact Assessment (HIA) was carried out to assess the

potential impact of the EU Common Agricultural Policy on local agriculture. Traditionally there have been small farms in Slovenia, with an average size of 5 hectares. Modern farming promotes efficient large farms, but it is not possible to change that infrastructure rapidly. Instead, the results of the HIA suggested that bringing together the desire to promote local supply chains and to encourage people to eat more fruit and vegetables, especially in schools, provided an opportunity to encourage small local farms in the region to grow more fruit and vegetables.

> *You don't need 15 hectares to be economically effective in fruit and vegetable production, and that was a kind of solution also for small-scale farmers: why they should keep in mind the health concerns of changing the nutrition patterns of the population*. (Tatjana Buzeti)

Under the strand of promoting healthy tourism it was recognised that health spas have also been a source of income in the region, so they provided the opportunity to bring together goals for economic improvements and goals for improving health through improving the infrastructure for physical activity: the four regional spas have been connected through cycle routes.

The stewardship from the MoH was essential in making this pilot programme happen, and demonstrated a high level of political commitment from them. The MoH showed courage in asking people from many different backgrounds to be involved in the health strategy: it was the first time the different sectors had planned together rather than separately. The MoH was also very proactive in reciprocal discussions about policies in other sectors. For example, there had been a programme to promote the wine industry for tourism, which would have contradicted the strategy of reducing alcohol consumption. The ministry managed to get this removed, and instead they invested in ecological tourism and the infrastructure for cycling and walking paths.

Other key factors for the success of this programme have been: persistence – it took four years of advocacy by the MoH from the initial Investment for Health Appraisal in 1996 before something happened – and a sustained allocation of resources over that time; policy coherence – policies need to be aligned with broad shared objectives that facilitate inter-sectoral working; setting clear roles and responsibilities; an emphasis on capacity building at the beginning of the process, both in terms of health intelligence and leadership public health; sharing the learning with other regions (Buzeti and Maučec Zakotnik, 2008). All of these factors have helped to maintain commitment to this process in the context of a shift in government from left to right.

Commentary:

Tackling regional inequalities in health in this way addressed several social determinants of inequalities in health in Slovenia at once, including food and agriculture, unemployment, education, social cohesion. A mix of all three of Graham's approaches to tackling social inequalities in health was used, focusing on levelling up the regions, as well as targeting some vulnerable groups within the regions. The question arose of what would happen with a change of government. This happened in 2005 in Slovenia, but the strong positioning of health at the regional level ensured that the focus stayed on this issue. It illustrated that pressure

from the regional level can help ensure that pressure is kept on the national level to keep health on the agenda.

CASE STUDY: NORTH WEST ENGLAND: THE CONTRIBUTION OF THE NHS TO REGIONAL DEVELOPMENT

Public health planners and policy advisers in the North West Region of England have been turning their minds to how the National Health Service (NHS) can address the social determinants of poverty and unemployment more directly. The North West region has a population of 6.7 million people (ONS, 2008). It is the poorest of the 9 English regions and is an unemployment hotspot. It contains the local authorities with the highest rates of mortality and morbidity in England.

Within the region, the NHS is not only a service provider, but it also contributes greatly to the local economy. It was estimated that the health and social care sector contributed 6.7 % of regional GDP (Machin, 2002; Jochelson et al, 2004). In the financial year 2000-1 the total revenue expenditure for the health and social care sector was £6 billion: £4 billion on labour and £2 billion on goods and services (Machin, 2002; SQW Ltd, 2004). The extent to which those goods and services are sourced from within the North West region could therefore have a significant effect on the regional economy (Machin, 2002).

The health and social care sector is also a major employer in the local and regional economies. In 2000-1 it employed 192,000 staff (6.8% of the economically active population); when indirect and induced employment were taken into consideration the sector supported 418,000 jobs (14.8% of jobs in the region). This sector is a large employer of women and ethnic minorities. In 2003 it was estimated that a planned expansion of the NHS over the decade 2000-2010 would create an additional 43,000 jobs.

> *The economic and employment role of the health and social care economy can make a significant contribution to reducing health and social inequalities through targeting of employment and by increasing the regional share of expenditure on goods and services*. (Machin, 2002, p.13).

How can this economic power be harnessed for local regeneration? The NHS has linked with the Regional Development Agency to integrate into sustainable development and regeneration plans for the most disadvantaged areas. Locally, the NHS looked to recruitment and training of people from disadvantaged areas to fill vacancies in the NHS; and also the NHS aimed to purchase goods locally and to use local services to help boost local economies, particularly in disadvantaged areas.

This process stalled with the re-organisation of the NHS that took place in 2003. However, much of the work is now being done at local and sub-regional levels, where strategic leadership, innovation and policy development are now a core functions. A key development in this area is the introduction of Local Area Agreements, negotiated at the level of local government, and where the NHS is working together with non-health sector organisations to achieve a number of targets, both in health and other sectors.

At a regional level, the NHS North West and the North West Public Health Team have developed the *Northwest NHS Sustainable Development Work Programme*.

Although its main aim is to reduce the impact of the NHS on climate change, it includes many of the objectives discussed above: for example, promoting local procurement and local recruitment from within marginalised areas and groups (Passman, 2008).

Commentary

This initiative in the North West of England is one of the most innovative, and practical, examples of how sub-national health agencies could set about tackling poverty and unemployment directly in their area of operation. It is certainly worthy of closer study. There are, however, many countervailing forces, working against this kind of action including:

- increasing privatisation of the NHS and Private Finance Initiatives that use private sector investment to build public sector facilities (e.g. new hospitals);
- contracting out services (e.g. cleaning) to private and voluntary sector organisations with poorer employment terms and conditions;
- where assets/purchasing power goes out of local control (including to US commercial companies) where, for example, general practice services are opened to tender from both public and private providers;
- EU tendering rules that require open tendering for services, which mean that preference for contracts cannot be given to local areas.

CASE STUDY: NORWAY: Comprehensive strategies to tackle the social gradient in health

The Nordic countries have a history of universal welfare policies. They also have high life expectancy and low infant mortality. Despite being a prosperous nation that enjoys good population health in general, Norway has acknowledged that it had systematic inequalities in health between different socioeconomic groups. Four years ago, it set out to design a strategy to tackle these:

> *We asked scientists about policies to reduce inequalities in health, and they said, we couldn't do it – that we needed more research, it will take a long time etc. We formed an expert group to give advice and it was so fruitful. We gave them the concepts and principles from international literature and asked them to generate Norway's concepts and principles*. (Tone Poulsson Torgersen)

The resulting 2007 *Norwegian Strategy to Reduce Social Inequalities in Health* clearly states that

> *a fair distribution of resources is good public health policy. The primary goal of future public health work is not to further improve the health of the people that already enjoy good health. The challenge now is to bring the rest of the population up to the same level as the people who have the best health – levelling up*. (Norwegian Ministry of Health and Care Services, 2007, p.5)

Indeed levelling up to reduce the social inequalities in health is its primary objective.

Table 3.4 Norwegian intervention map

	Social reform (Upstream)	**Risk reduction** (Midstream)	**Effect reduction** (Downstream)
Universal measures	Public system for education, taxes, labour market policies	Working/living environment, structural lifestyle measures	Universal health services
Selective measures	Means-tested social benefits	Targeted lifestyle measures	Targeted health services

Source: Tone Poulsson Torgersen (2007), presentation to the meeting

Table 3.5 Priority Areas and Policy Instruments set out in the Norwegian National Strategy to Reduce Social Inequalities in Health

Priority Area	**Examples of policy instruments/action**
1. Reduce social inequalities that contribute to inequalities in health.	Tax systems that promote fair income distribution, creation of safe childhood conditions through kindergarten, schools and children's services, investment to promote an inclusive labour market and healthier working environments.
2. Reduce social inequalities in health behaviour and use of the health services.	Price and taxing policies to regulate availability of healthy goods and services, health promotion activities in schools and at the work place, undertake surveys to map access to health services, user fees and financing mechanisms may be tools to alter any inequitable patterns of access to the services.
3. Targeted initiatives to promote social inclusion.	Increase budgets to focus on excluded groups and deprived geographical areas, improve access to labour markets and adult education.
4. Develop knowledge and cross-sectoral tools.	Set up monitoring systems and develop appropriate indicators for social determinants, develop expertise in health impact assessments, introduce annual reports. Each sector (health and care, environment, local government and regional development) to collaborate to ensure social inequalities in health are central to planning and be responsible for reporting on their indicators each year at the time of the national budget.

Source: Adapted from Norwegian Ministry of Health and Care Services (2007)

Two messages from the preliminary strategy development were important for policy design:

> *(1) Since it is a gradient, targeting high-risk groups is not enough – it affects all of us so we need a universal approach. Of course it is the health of the worst-off that we want to improve the most. But this must not be seen as synonymous with an exclusive reliance on high-risk strategies. Being universal covers everybody, is not stigmatising and often is most beneficial to the most vulnerable. This again does not exclude targeting. You need to do both and find the right balance.*
>
> *(2) The focus should be on the whole causal chain – upstream, midstream and downstream. Lifestyle factors show a very clear social gradient, therefore they are socially produced.*
>
> (Tone Poulsson Torgersen)

During the development of the Norwegian policy, an 'intervention map' was used during discussions with politicians (Table 3.4). It contains six cells where action can be taken. A policy had to address all six cells for it to be considered comprehensive.

The Norwegian strategy to reduce social inequalities in health covers all 6 cells of the intervention map, combining universal policies and programmes with selective measures to help the most disadvantaged (the benefits of which were discussed in Chapter 2, page 16). Early on, the national politicians agreed to the comprehensiveness of the strategy, including income redistribution. There are four priority areas and within each priority area there are examples of policy instruments and actions, and systems have been set up to monitor progress. Table 3.5 outlines these four areas, together with examples of equity-oriented policy action.

Commentary: Norway's favourable position versus the rest of Europe

In Norway we have an example of a country that is moving towards an approach that addresses the social gradient – covering this cascade of measures with a well resourced social democratic welfare system. It could be argued from the knowledge base that Norway is in one of the most favourable positions from which to launch an attack on inequalities. Most other countries are in less favourable situations. Even neighbouring Denmark, a wealthy country with a high GDP per capita and favourable social and economic conditions, such as low child poverty and low unemployment, and a strong welfare state, has other circumstances working against it. Denmark's life expectancy is about the same as the United States (i.e. lower than would be expected for its level of economic development) and its burden of disease about 30% higher than Sweden.

Countervailing forces in Denmark include the exceedingly powerful drinks and tobacco industries, which, over the years have led to much weaker control policies for these substances than in other Nordic countries, reflected in the scale of the tobacco epidemic in Denmark.

England is likewise hampered by a different set of adverse conditions: trying to introduce inequalities policies against a background of the erosion of the welfare state. Between the 1950s and early 1980s, the welfare, education and tax system were redistributive, since then this has begun to be dismantled. The task of reducing inequalities in health in England against this dual backdrop of growing social inequalities and weakening welfare system is several degrees harder as a

consequence. That is not intended as an excuse, but as a realistic acknowledgement of the scale of the task.

The UK as one big natural policy experiment

The experience of the UK is very important in Europe. (Erio Ziglio)

International participants stressed that the experience of the UK is very important to policy makers in Europe. They highlighted the unique position of the UK in the policy debate on tackling inequalities in health in Europe and globally. Essentially, what the country has had is over 10 years of political stability, in which the national government has been explicitly committed to addressing social inequalities in health and has instigated an array of policies, interventions and action plans within and beyond the NHS. Different types of initiatives with different objectives have been tried at different times during the 10 years and in different parts of the country.

…every ministry has tried to tackle issues of social justice whether its about housing, education, welfare, we have had policies where we have tried to do that, and we have had a national policy attacking inequalities and we have been trying to get action in our health service … We may not have reached and achieved all the things we wanted to achieve, but then you never do in policy terms because policy's always about translating political vision into practical action and visions somehow get watered down as you go through the system of what you achieve. But at least we tried to do it. (Fiona Adshead)

The experience could be likened to one big natural policy experiment with many facets. Some actions may have been constructive, others counterproductive, but all offer an unprecedented opportunity not only for people within the UK but also for public health advocates everywhere to learn from this rich experience. It is, however, clearly a substantial task to distil the policy lessons in such a way that they are useful for future strategy development. The WHO Venice Office is in a good position to advise on what different European countries would find most helpful.

To have a clear target as in the UK is good in itself, and to have tried to reach this target is also something to be admired. I don't think you need to focus on the negative so much. In Germany we have been trying for years to get the government to set a target for the reduction of health inequalities and didn't get it yet. (Andreas Mielck)

4: Tackling social determinants of inequalities in health: what helps or hinders the process?

Introduction

Chapter 4 discusses tools and processes that can facilitate or create barriers to successful policy implementation, and suggests actions that would improve this process. The participants of the meeting had all been involved in working with policy advisers and they described what had facilitated or blocked efforts.

> *I'm glad you have made the distinction between the rationale and the policy options on the one hand and on the other hand the process. Because very often, I think, we neglect the process of how power is negotiated and how to navigate the process of inter-sectoral or multi-sectoral work.* (Tone Poulsson Torgersen)

What helps?

Political commitment

Participants all agreed that an absolutely essential ingredient in tackling health inequalities is political commitment in those that have the power to make the key decisions. Often there is plenty of commitment in local communities: it is national political commitment that is lacking.

Tackling health inequalities has been a core policy goal alongside general health improvement in several countries in western and northern Europe in the last decade, including the UK, Sweden and Norway. However, what this means and how it is interpreted and understood differs in the different contexts, which in turn affects the type of policies that are put in place. The challenge is to generate and maintain political commitment to reducing health inequalities as this context changes.

> *I think some of this is about how we renew and maintain policy over time … it's about maintaining, sustaining, renewing …* (Mark Exworthy)

Public health strategies are vulnerable to changes in political circumstances, such as a change in national government. Therefore building a strong cross-party consensus that values equity-oriented health policies is essential. Engaging politicians from all parties was an important aspect of the 2006-7 Norwegian policy development. In 2006, Sweden's government changed from a left- to a right-wing one and, although many other policies have changed as a result, as yet the commitment to the broad public health strategy has held. Similarly in Slovenia cross-sectoral and multi-sectoral working to improve health at both the national and regional levels was established and supported under a left-wing government during 2000-5. The strength of the commitment to this way of working at the regional level helped to maintain the commitment at the national level following a change to a more right-wing government in 2005.

In some of the former Soviet and accession states, the picture is quite different, in that there is no apparent political commitment at the highest levels to the public health system in general and to tackling inequalities in health in particular. In fact, in the view of some participants, the lack of political power of the people and lack of

commitment to health at the highest levels is one of the major underlying reasons for the observed inequalities in health in these countries.

> *If we'd like to tackle the social determinants of health in these former Soviet Union countries, first of all we have to have more political commitment and higher allocation* [of expenditure] *on health and to give health more priority in these countries*. (Amiran Gamkrelidze)

A special role for WHO, as outlined later, would be to help public health professionals in Eastern and Central European countries with their efforts to strengthen political power and to guide them on how information available internationally about health and inequalities can be used to create political dialogue on a very high level in their own countries.

There are hidden challenges to political commitment. The participants at this meeting agreed that differential access to power and resources, especially within the dominant international economic model, is a main driver of inequalities. When ideas, such as this economic model, become embedded they become more difficult to challenge because they are the accepted way of doing things and people stop seeing that there are alternative models.

> *I'm surprised that we're not saying more about 'economics as if people mattered'; in other words, alternatives to the liberal and neo-liberal macroeconomic policies, rather than how can we create economic growth and get equity at the same time.* (Alex Scott-Samuel)

When this economic rhetoric goes unchallenged it can be hard to keep equity on the agenda.

> *… when the dogma becomes primary – it's because we've actually got a lot of weakness in our political coalitions to assert health as a human right, to assert these kind of challenges and to essentially make a modification around some of these things … It's not just about community empowerment, it's also about bringing on board parliamentary and strategic actors who are willing to confront those challenges.* (Rene Loewenson)

Debates about the determinants of health and illness are dominated by the ideas and beliefs of those with the most power to influence them. This "dominant discourse", therefore, determines the common understandings of health and illness, their underlying causes and what can be done to improve health outcomes. Crucially, this discourse also determines what is excluded from the debates about the determinants of health. For example,

> *the prevailing political climate in UK health policy (and national policy-making more widely) is dominated by the discourse of modernism, in which good practice is equated with finding out 'what works', implementing it efficiently and cost effectively, and measuring progress in terms of key outcome indicators.* (Russell et al, 2008, p.41)

Focusing on "what works" in effect limits policy options to those actions that can be easily measured and that may have an effect in a relatively short space of time. In the UK, the dominant discourse focuses on the distribution of unhealthy behaviours within society as the explanation for health inequalities; the effects of capitalism, patriarchy (the systematic domination by men of women and other men) and poverty as primary causes of health inequalities are often *excluded* from public debate.

> *But there must be explicit recognition in healthy public policy that these are key drivers of health inequalities; even if … the ultimate conclusion is … that we're going to ignore them.* (Alex Scott-Samuel)

There are different classifications of causes of death that are actually poverty-related and they are usually not recorded as such. For example: mortality by hypothermia or under-nutrition is linked to social conditions such as poverty and deprivation. However, death certificates hardly ever report this link. (Erio Ziglio)

Giving equity initiatives more time to work

Governments can be too quick to judge policies and programmes as failures and withdraw their support. This is a particular problem with initiatives to help more vulnerable groups. Vulnerable groups are more susceptible to negative influences on health, such as the loss of a job or climate change, and so the impact of such events are likely to show quickly in these groups. In contrast more privileged groups may be better able to buffer themselves against negative influences, and so the impact might not show until a much later date. The converse is also true, that positive influences, such as health education or health promoting initiatives, will be taken up more quickly by more privileged groups and, because of the convergence of multiple risk factors and risk conditions, might take a long time to show an improvement for vulnerable groups. Policies and programmes aimed at helping vulnerable groups should, therefore, be allowed to run their course: if a programme was set to run for five years, let it run for five years because it might take that length of time to demonstrate positive change.

We are talking about time for a process, and this time has to be used for understanding, for sinking in, and for adaption - adaption at different levels of society, and adaption to different actors. (Bosse Pettersson)

Multi-sectoral action is needed, but what makes it work?

The complexity of the social determinants of health, the way they cluster and interact in the most vulnerable and disadvantaged people, groups and places, and their differential impact throughout the social gradient, mean that it will require a co-ordinated and multi-faceted approach across sectors to level up health. Factors that help the process include:

Recognising the role of the health sector

There needs to be a clear message that although inadequate access to health services is not a major cause of social inequalities in health, the health sector has an important role to play in tackling the problem. There is a danger, however, that the health sector may be excluded from attempts to broaden action to improve health and reduce the social gradient in health status. For example, public health advocates in Sweden felt they had made a mistake initially in excluding their health sector from their public health strategy, albeit in an attempt to shift the emphasis away from medical and physical health to social health.

…in that national plan for health equity in Sweden we kind of lost the health sector out of the system. They didn't feel that they were part of the problem and they were certainly not part of the solution. (Finn Diderichsen)

The health sector should be a partner in multi-sectoral action to improve health and, as the sector most obviously associated with promoting health, has a vital role to play as mediator and facilitator in the processes to bring this work about.

> *The stewardship from the Ministry Of Health was essential in getting this to happen, and showed a high level of political commitment*. (Tatjana Buzeti)

Similarly the German and Polish participants felt that general practitioners had an important role to play in raising awareness of the social determinants of health and health inequalities at a national and regional level and should not be forgotten.

> *There is such a mixed picture including so many sectors and people, but having a major, important advocate who has the authority to talk about health, could be an important way to combine the efforts of these sectors in a more straight forward way.* (Andreas Mielck)

Leave ownership with other sectors

However, it is also important for people within the health sector to recognise that we have neither the expertise nor the capacity to lead on work in other sectors.

> *We have to distinguish between the different issues, if we know about effective measures and we control them, then of course the health sector is in the lead of those policies. But I think often we want to be in the lead of the whole thing. But there are issues where we have knowledge of effective measures, but we don't control the arenas for it – for example, the workplace, the schools, etc. There we might be in the lead for advocating for it, but we have to still ensure the ownership in the other sector*. (Tone Poulsson Torgersen)

The policy development process in the health sector is very influenced by medical thinking – we make guidelines and approach other sectors to implement them just like diagnosing a disease and prescribing a cure. In doing that we remove ownership of the solutions from the sectors we approach. Effective multi-sectoral collaboration requires that the health sector recognise that it does not always have the expertise required and to leave ownership of the process with those who will implement the policies.

> *Handing over ownership to the other sectors was of critical importance* [in Sweden]. *They may not do it like we would do it but if we ask them to do it we need to let them find their own way, we need to facilitate them. If it is an education agency, their primary concern is education. We need to show them that, by promoting health they will be more successful, and achieve a more equitable outcome in their educational achievements*. (Bosse Pettersson)

In Slovenia, for example, the ownership of the regional health development programme was given to the regional development agency. Although the public health institute was an effective facilitator of the process, it was important that the implementation was not seen to belong to the health sector.

Another advantage of leaving ownership with other sectors is that it helps clarify the roles and responsibilities of each sector in the process. At a local level, involvement in multi-sectoral action initiated by the health sector may prove difficult for other sectors to justify if they cannot relate the outcomes to their own agendas.

Creating a dialogue with other sectors

From the public health perspective, it is important to appreciate what different sectors are already doing that could contribute to health improvement. As well as recognising their expertise, we also need to recognise their existing policies.

> *It has been a slight failing sometimes on the part of public health – coming into another sector talking about employment or whatever as though they are new to the concept – obviously, its very condescending, those sorts of conversations. So I totally agree that we need a dialogue; we need to recognise where these existing policies are.* (Margaret Whitehead)

An important part of this will be to take the time to learn each other's language and to find channels of communication so that we can understand each other's work. Without this, the health sector could be perceived as an uninvited guest. In this process it is important to include as many sectors as possible, such as the civil society sector, the business sector and the environment sector, and to recognise that they are not static, but change over time.

> *The different sectors have all moved on. For example, schools* [in England] *are looking to be community assets and resources. Is there some way that we can build on that development that is going on in schools? Similarly with workplaces, we've moved away in Europe from traditional manufacturing workplaces. We now have a whole host of different, often smaller, not very formalised workplaces. And yet we still hark back to this very traditional occupational health, occupational medicine type model. There are other models of how you put health into workplaces*. (Paula Grey)

As well as inviting other sectors to consider how they might contribute to health development, the health sector will need to consider how overall development can contribute to health, and see how we can take those arguments and place them high enough as a political concern to argue for economic growth to be used as a resource for health improvement of the whole population, including vulnerable groups.

One way to facilitate this work is to bring different sectors together to talk about how they can contribute to health improvement. A good example of this process was the series of WHO meetings that were held in the mid 1980s as part of a broader set of activities to develop recommendations on "inter-sectoral cooperation in national strategies for health for all" to the World Health Assembly in 1986. These recommendations and the outcomes of the meetings were published in a report "*Intersectoral Action for Health*" (WHO, 1986). Professor Göran Dahlgren chaired these technical meetings, which brought representatives from the health sector together with representatives from finance, agriculture, education, environmental management and protection, urban and rural development, planning, and so forth. Erio Ziglio pointed out that this process was very effective in fostering joint responses to improving health, although it is rarely done.

> *But that's the technique, it's so simple, but so rarely used, but actually bringing the people who are in education, in agriculture – not all at the same time, but sitting there with their professional knowledge rather than we, from the health sector, trying to learn enough to think that we can give some good advice*. (Göran Dahlgren)

Using the Rainbow Model to identify policy entry-points

Many of the participants of the meeting felt that the Rainbow Model (see Figure 1.1) could be a very useful tool for engaging with policy makers and for identifying policy entry-points. It is a good starting point for engaging with different sectors and organisations. Its pictorial representation of the main determinants of health and how they fall into layers of influence can engage with people in a practical way. It also provides an opportunity to consider which other less obvious sectors might be

engaged with, such as the environmental agencies and civil society sectors (community groups, charities, etc.).

> *The basic question is what* [politicians] *understand and want to do. Explain the rainbow system and ask them "what is your contribution to this system?", "what can you contribute to your entry-point?" …In this way we can hope to obtain a more pragmatic approach.* (Andreas Mielck)

Some of the case studies presented in the Chapter 3 considered specific issues through an 'equity lens'. Some participants found this approach very helpful.

> *I like the term that was used, this 'equity lens'. I think this could be one of the things that we could actually promote as a certain tool… if I could compare it to something, it's like a picture taken with an old type, electronic camera with one or two million pixels – it's like a general picture. If you want to go deeper to get more details, you just cannot, because the picture is* [not fine enough] *and so on. I think, after listening to this presentation, I think that this idea of applying this equity lens would sharpen the picture.* (Maciek Godycki-Cwirko)

Managing the process

Bringing different sectors together can be challenging. Advocating for health, creating a dialogue with and respecting the role of other sectors are important steps, but there also need to be mechanisms in place to encourage collaboration and monitor outcomes. Such mechanisms can include having a high level, cross-sector steering committee, developing indicators for key outcomes, and producing regular public health reports for parliament.

Effective strategic management is an essential component of successful multi-sectoral action for public health. In Sweden this process was led by a Minister for Public Health, with a mandate to work across government ministries, supported by a steering group.

> *One of the proposals that also came through was to appoint a special public health minister. And I think this has a very important symbolic and visibility value. This public health minister is not responsible for the health and medical care services, but for this strategy and for public health-related issues, and also has the mandate, a bit similar to the environment minister, to act across the ministries. … We also established a high level national public health steering committee, chaired by the minister, and composed by about 20 director generals, representatives from local authorities and the regions.* (Bosse Pettersson)

The management of this process would be supported through the development of measurement tools and indicators that make population health and equity goals a priority in health sector and other sector planning; ensuring that these departments are accountable for their work towards health improvement goals; and regular public health reports to parliament.

Supporting multi-sectoral action

There are several other conditions and actions that, in addition to the strategies above, could help to support multi-sectoral action on reducing inequalities in health:

- Broad-based political commitment to the process.

  > *… if equity-orientated strategies only can exist when you have left-wing governments then it's also quite limited, of course, in real life*. (Bosse Pettersson)

- Create a demand amongst the public for pro-equity, population health policies. This would empower different government sectors to argue for their involvement in multi-sectoral action to improve health and reduce inequalities.
- Work within existing organisational structures. There is a danger that if new organisational structures, such as cross-sectoral committees, are established the representatives on those committees will become disconnected from their original sectors and the new organisational structures will become an additional layer of bureaucracy. Instead,

  we have to invite all the sectors to say what they have done to reduce inequalities in health. (Tone Poulsson Torgersen)
- Argue for the added value *to them* of different sectors being involved with improving health and reducing inequalities.

  … there have been very intensive projects to try and do just this – to say what's the value added at each level [national, regional and local]*, and what should each of the agencies be doing, so that there's a support for inter-sectoral work*. (Peter Flynn)
- Develop tools to facilitate cross-sectoral work, such as health equity impact assessment (Norwegian Ministry of Health and Care Services, 2007).
- Involve international agencies that can support and protect the process of multi-sectoral collaboration.

  Of course [the civil society sector] *often get very adverse reactions from the state, so there is an issue about the role of international agencies and others in supporting and thinking about ways in which we can protect that sector and build that sector*. (Jennie Popay)

What has hindered the process? The countervailing forces

Swimming against the tide

In England this might be as good as it gets. We have had 10 years of political stability. The government can point to successes in addressing the gradient through redistribution, but there are countervailing forces at work: there have been huge changes in economic inequalities, changes in population demographics, outsourcing of jobs to other countries. We need to recognise that national policy effects are limited. Governments have increasingly less control over policies – or they have more power over less - power is now going up to EU or down to regions or cities and global influences. (Mark Exworthy)

One of the assumptions made in public health when talking about upstream and downstream policies is that the current of the stream is flowing freely in one direction. A more realistic picture of the stream would show whirlpools, tributaries and dams that have forced public health actions off their course. For example, in the UK the countervailing forces to public health policies include:

- Mainstream policies that lead to huge changes in and the widening of social and economic inequalities.
- The erosion of the universal aspects of the social welfare systems.
- Fragmentation and privatisation of health services.
- Changes in employment patterns and opportunities.
- Limited effects of national policy and increasing influence of EU, regional and global powers.

- The market emphasis on individualism working against the need to sustain or develop social cohesion.
- An ever reforming health sector, which makes it difficult to sustain the delivery of services to address inequalities.

This context for public health will differ by country and will affect the priorities given to specific problems and policies to address them. There are no universal solutions to the underlying causes of social inequalities in health; solutions will have to be tailored for the specific country, region, group and problem.

> *It is important to have examples from different countries. We can have an overview, but we need to contextualize it to move from problem definition to solution definition.* (Erio Ziglio)

Pilot initiatives rather than sustained action

There is a tendency for actions to tackle social inequalities in health to be concentrated in pilot initiatives that are then not scaled up into sustainable, mainstream policies. Many of the pilot initiatives in this field have been innovative and had the potential to generate learning from their successes and failures. If they are not able to show marked effects early on in their process, however, politicians tend to lose interest in them and no real learning is achieved; these same programmes are then sometimes reinvented under different names. Consequently much more is known about the effectiveness of small-scale initiatives than what can be achieved through mainstream interventions.

> *My concern is that unless you have a co-ordinated approach to these kinds of developments, we'll end up with lots more little pilots again. And it would be really nice to have some way that we can support some of these sectoral developments and advances, bring health into it, but have it as a more co-ordinated approach rather than another little project or pilot that we all do and don't really learn much from.* (Paula Grey)

In other cases, some successful pilots have been rolled out on a national level, but because it is too expensive to roll out the full pilot programmes, the mainstream versions may be reduced forms of the pilot and therefore may not be as effective.

> *The challenge I see in many countries is to move from pilot projects to mainstreaming determinants of health into the overall health system development.* (Erio Ziglio)

Where equity-oriented initiatives are primarily rolled out through pilot initiatives, it also makes the policy focus on reducing inequalities vulnerable to political change, as funding for pilots is easy to withdraw.

> *Healthy Living Centres (HLC) are one of those area-based policies where there have been successes. There used to be a strong HLC network. Many of them do not have sustainable funding. This is an example of doing really interesting things and then just moving on and not learning from what has been achieved. There is a memory lapse amongst politicians, so they don't know if policies have been successful because their attention goes elsewhere. Policy makers relapse more often than smokers!* (Jennie Popay)

The national context working against local policy implementation

Some of the wider determinants of health inequalities are best tackled at the national level, specifically issues to do with the social gradient in health inequalities, such as national economic policies that affect local access to resources. However,

multi-sectoral action to strengthen communities works best at the local level and regional levels. It is easier to build relationships locally that are based on trust: people are physically closer to each other, they may already know one another, and so it can be easier to build and sustain commitment to joint working.

> *Probably the local* [level] *is much more convenient to implement such a programme; the commitment of politicians is higher, people are closer … successful steps are very visible, or more visible than on the national level.* (Alena Steflova)

However, local policy implementation can be supported or hampered by national policy processes. This is not only in the sense of working with or against the grain of national policy, as described earlier in this chapter, but also in the way that national policies can create conditions that may or may not facilitate local policy implementation.

> *… the potential for inter-sectoral action, as opposed to the action of different sectors, is much greater at the local level, where people can build up trust relationships. Then it comes down to the way government is organised, or the way sectors are organised, to enable decision making at that level,* [to allow] *those relationships to grow and* [to facilitate] *the interface with civil society and other partners.* (Rene Loewenson)

The following UK example of pressures on schools shows how uncoordinated national policies can create a large burden at the local level. Often there is a sense at the local and regional level that the work people do is not understood at the national level. The UK Neighbourhood Renewal Unit funded the *Places Project,* which attempted to look at how all government policies impinged on a particular place. It was focused on three local authorities, and it involved senior civil servants from national government departments, senior civil servants from the region, and senior people from the local authorities. Manchester in the north west of England was one of the local authorities that took part. Taking schools as an example of the process, the analysis discovered that five different government ministries were involved in giving instructions to schools about local implementation of national policy: there was an extended schools programme, using the school as a community resource; there was a Healthy Schools programme run by the Department of Health; the school was being asked to increase its activity levels by the Department of Media and Sport; then main educational objectives were set by the Department for Education and Skills (now the Department for Children, Schools and Families). Each of these activities had a set of targets and a performance management process, which was very burdensome for the schools concerned.

> *The disappointing thing was that at the end of that process the deputy Chief Executive of the city council said that he felt like the local partners had been mugged – that central government had come in and had a very open discussion about co-ordination at a local level and a regional level, but when we asked very simple things like - instead of asking the school to deal with 5 different government departments, could they just be given a generic set of activities around the school as a total wellbeing setting to simplify the bureaucratic process* [they had little support]. (Peter Flynn)

It is important, therefore, that governments not only create opportunities for innovation at the local level, but also that national and local policy implementation processes are aligned and work in synergy with each other.

> *Because one of the senses I have, and this comes up from a number of reviews of interventions* [that have not been successful]*, is the message that the interventions may work if the context in which they were being implemented was different.* (Hilary Graham)

The need for professional capacity building

There is a need for professional education and capacity building, so that professionals who work with, and on behalf of, low-income individuals and families – politicians, GPs, district nurses, teachers, social workers - have a better understanding of what it actually means to be poor and what poor people need for their social circumstances to improve. The notion that people on low-income have low aspirations for their health needs to be challenged. Instead, we need to examine the possibility that it is professionals' poor aspirations for low-income children and adults that helps to perpetuate their position and experiences in society.

With good reason, community engagement has been placed as a necessary component of many of the regeneration and health policies. In practice, in many countries, it has not always been done well. It has been focused on engaging people in local activities, such as food clubs, instead of true engagement in social and political decision making, and at the same time reducing their access to social welfare. The social exclusion report of the Global Commission on the Social Determinants of Health has identified different types of empowerment: material, psychosocial and political empowerment (Popay et al, 2008). As we have seen in the case study from Slovenia, the health sector and health professionals could potentially play an important role in enabling these types of empowerment, if efforts are made to build their capacity to do so.

The role of civil society in reducing health inequalities

> *Civil society refers to the arena of uncoerced collective action around shared interests, purposes, and values. In theory, its institutional forms are distinct from those of the state, family, and market though, in practice, the boundaries between state, civil society, family, and market are complex. Civil society is often populated by organizations such as registered charities, development nongovernmental organizations, community groups, women's organizations, faith-based organizations, professional organizations, trade unions, self-help groups, social movements, business associations, coalitions, and advocacy groups.* (CSDH, 2008, p.27)

Civil society could play a hugely important role in addressing health inequalities. Throughout history, there are examples of the role that civil society has played in bringing about change for disadvantaged groups, be it through the organised efforts of trade unions, or wider social movements, such as the anti-apartheid movement in South Africa or the movements that have brought about political change in South America in the late nineties.

> *If you look historically it was the trade unions that delivered occupational health. It was the anti-poverty group that got child benefit in the UK, which advocated for it and drove it through. It was the mental health survivors' movement that got dramatic changes in mental health services. So civil society and social movements as agents for change are phenomenally powerful*. (Jennie Popay)

Today, across the world, there are examples of civil society promoting community involvement, delivering services to poor and marginalised groups, playing an important advocacy role and mobilising large scale social movements. The example in Box 3.1 is from Venezuela and illustrates how communities have organised to influence how and where health services are designed and delivered.

Box 3.1 Role of civil society, Venezuela

'Neighbourhood health committees, elected from local residents were responsible for identifying accommodation in the Barrio for new doctors and the clinics they were to open, but in some instances they appear to have become a powerful force promoting local social cohesion. They retain oversight of the strategic development of health care in their neighbourhoods and over time their role has extended and they are now able to make proposals for funds to support interventions to improve the health of local people. By 2006, there were almost 9,000 elected neighbourhood health committees registered with the National Health Committee Co-ordinating Office set up by the Ministry of Health, and many more committees linked to local clinics are not registered. These committees are becoming involved in the implementation of other social missions in their neighbourhoods and are seen as a key building block in the new participative democracy the Venezuelan government is seeking to build. However, whilst the vision is grand there is little solid evidence yet of the functioning of these committees'.

Source: Popay et al (2008, p.144); reproduced with permission from Jennie Popay

Increasingly, the importance of engaging with communities through this sector is being recognised at a national and international policy level. It is linked to debates about strengthening democratic processes and the need to involve communities in decisions that affect them, so that policies become more acceptable and sustainable. To this end, civil society needs to be supported, but it also needs to be protected in terms of its relationship with the state if its advocacy function is to be realised.

> *All of these issues are ideally, at least, connected with participatory processes with society, with social movements, and with the unions. Talking about work and health, for example, it would be such an important issue to make the connection with unions and with safety representatives or delegates of prevention, who play such a crucial role in improving working conditions in terms of health and health and safety.* (Joan Benach)

The success of community action and participation to tackle health inequalities depends on a number of factors, including how the state interfaces with the sector and how power is distributed across society, for example between professionals and the community (see also Gilson *et al,* 2007). Over the last five years in Germany, information about active community-based health promotion projects have been collected and made into a free internet resource which anyone can access. There are a total of 3000 small-scale projects listed on the database, from which a theory of good practice has been developed and can be shared across the country. This operates at a state level, in terms of how it is promoted and organised, and prizes are awarded to those projects that demonstrate good practice according to the agreed criteria, one of which is community empowerment. There are cases of where this 'bottom-up' approach has influenced national policy and practice.

> *In the northern state of Germany, there was a small-scale project focussing on poor families. It was run by a community in order to help those families to receive more support for childcare. The state government took up the idea and now it is a state-wide programme, based on the prize that we gave to them. The whole idea is that we try to learn from the practical experiences of these small-scale projects.* (Andreas Mielck)

The link between community participation and strengthening democratic processes has been made explicit in the Swedish public health strategy. It aims 'to provide societal conditions for good health on equal terms for the entire population'. A key objective and indicator of the strategy is public participation and influence on society, measured by participation in municipal elections, the index of gender equality and the percentage of the population actively employed in the workforce (at a municipal level). Here, they identified which municipalities had the most equitable health, as measured by degree of social inequality in avoidable mortality, risk factor exposure and sickness absence. They surmised that the two most equitable municipalities in terms of health were those in which local politicians were actively engaged with their citizens both in terms of how they used their resources and how they wanted to offer them equal opportunities.

In Calgary, Canada there is a proposal to create a 'demand for public health' among the population, in the same way that there exists a demand for heath-care services. As well as the newly formed public health observatory mapping the unequal distribution of health problems, they plan to map the unequal distribution of solutions. The hope is that this would inform the population that some areas have policies in place which promote health whereas others do not. This in turn might engender a demand for pro-equity, population health policies.

Commentary:

Participants agreed that the role of civil society is essential and could indeed be transformational in bringing about change.

> *So, to me, a very central theme of all these issues, thinking about policy and also about politics, really needs to be related to real democracy or real participatory processes.* (Joan Benach)

Governments need communities to be actively engaged in policy processes, but at the same time it needs to be recognised that on its own community engagement or action cannot solve the wider structural causes of health inequalities.

> [Community development organisations] *are under no illusion that they are tackling the root causes of a problem, they are under no illusion that that's going to address poverty, but while they are waiting for other moves to address poverty, they are doing something that's tackling the structural causes of disempowerment and, therefore, wealth. And so what they're doing there has the potential to make quite significant change*. (Alan Shiell)

The role of the World Health Organization

> *The World Health Organization has an important role to institutionalise the social determinants of health approach across all its working sectors. This is laid out in WHO's Medium Term Strategic Plan for 2008-2013*[a] *– which includes the strategic objective, "to address the underlying social and economic determinants of health through policies and programmes that enhance health equity and integrate pro-poor, gender-responsive, and human rights-based approaches".* (Erio Ziglio)

The World Health Organization's commitment to tackling inequalities in health has been a driving force in setting the policy agenda in Europe over the past two decades. In many countries, the WHO has been instrumental in providing policy

[a] WHO *(2008) Medium Term Strategic Plan for 2008-2013 (MTSP). Geneva: World Health Organization. Available online at: http://whqlibdoc.who.int/pb/2008-2009/MTSP_2008-2013_eng.pdf*

examples and advice for developing national frameworks for addressing equity and the social determinants of health. Participants in the meeting identified several additional ways in which the WHO could help to promote and sustain policy to reduce health inequalities.

Firstly, participants from transition countries would like the WHO to **provide advice** on choosing and setting *performance indicators*, in such a way as would influence the political commitment to health equity within countries.

> *I see here the special role of the WHO. How could we strengthen the political power in these countries, and how can this health information create more political dialogue on a very high level? Not only on the level of the ministries of health but on the level of the governments and the president to increase the political commitment to the general health sector and to give them the information that has recently been on the international level; health is getting more in the highest political international agenda.* (Amiran Gamkrelidze)

Secondly, the WHO could **support** health equity advocates within countries by ensuring that the vision of health equity and health as a human right is present in all *WHO documents* and development work. The *Levelling up* approach (Dahlgren and Whitehead, 2007) could be used to identify a framework for how the WHO can help to promote equity. This, combined with *evidence from around Europe,* could be used as a tool to help public health professionals advocate for a greater emphasis on the social determinants of health and equity-oriented policies in their own countries. Public health advocates could make use of *WHO networks*, such as Healthy Cities and Healthy Schools, to implement public health strategies. The WHO can help further those wanting to raise awareness of the social determinants of health by providing technical support on how to *strengthen political power* within a country, and how health equity information can be used to create and sustain *political dialogue* at a very high level.

Thirdly, the WHO can raise awareness of **regional and global influences** on national policies by promoting *health equity impact assessments* of policies such as regional trade agreements.

> *A lot of the multi-sector action is now coming from beyond the national level – regional trade agreements or even at the WTO level – and* [we need to consider] *the extent to which country processes are able to interface with and influence those.* [We need] *health impact assessments that go beyond national level; perhaps that's where the WHO regional office plays quite an important role in ensuring across countries that there is some modality to take some of those issues on board.* (Rene Loewenson)

New research and development needed

Several priorities for new research and development were identified during discussions at the meeting. These included:

Equity-oriented policies

- The development of new indicators to monitor equity-oriented policies, including ones to assess public participation and the different types of empowerment.

- Policy analysis and development on actions that tackle the full social gradient in health.
- How the research community thinks about poverty as a risk factor and conveys this to a policy audience.

The interactions of risk factors and risk conditions

- Explorations of clustering and synergistic effects of the interactions between risk factors and risk conditions that influence health outcomes for individuals and for groups. These risk conditions and risk factors originate from different places, so for example the macro effects of economic, employment and public sector policies will interact with the micro effects of lifestyle factors, crime levels and transport policies. Policies and programmes established to address one facet of this complex matrix of interacting factors and conditions should be assessed for their added value in contributing to the improvement of conditions as a whole and the reduction of inequalities.

  So what would be really, really important would be to look at, for example, how the welfare system – not the add-on interventions, but the existing policies – might impact on smoking. So the repeated process of being assessed, etc, and having one's income upped and downed, what does that do in the long term to motivation to changing other aspects of your life. (Hilary Graham)

- Investigating emerging risk conditions, such as precarious, insecure employment.
- Predictive research on future challenges to equity in health, for example climate change is likely to affect vulnerable groups most and more quickly. The effects of climate change are happening quickly. As resourceful groups are better able to adapt to rapid changes they will be better able to relocate and survive the effects of adverse weather conditions. Inequalities would widen under these conditions. In Spain, for example, there is a high level of construction in the coastal regions. Rising sea levels would have disastrous consequences for the poor in these new communities.

Understanding social influences on risk factors

- Understanding the social norms and conditions which influence the uptake of health-damaging behaviours, and the experience of poverty.
- Evaluations of the impact of improved socioeconomic circumstances on health-related behaviours, such as smoking, and, if so, what the time lag is between the two.

  I mean, you mentioned teenage mothers - and there's been plenty of work in England done on that - but the benefits, perhaps one of the benefits you might not necessarily associate with a welfare programme is reduced smoking. And I just don't think … that that gets factored into evaluations of welfare programmes. (Mark Exworthy)

Community development evaluation

- Research to capture the value of what community development is all about – the value, in the widest sense, of investment in the community along the lines being advocated in comprehensive strategies such as the Norwegian model.

Understanding the policy implementation processes

- Understanding the vertical influences on local policy implementation.

  The level of vertical integration is very important – whether other government policies support the implementation locally, or whether they make things more difficult. (Peter Flynn)

- Assessment of the long-term impact and legacy of some of the key pilot programmes, such as England's Health Action Zones and Healthy Living Centres, on health improvement in specific localities.
- Research into the specific issues affecting transition countries in Eastern Europe.
- Understanding the distribution of power in the policy process.

  One thing I think would be fantastic to do, to understand, is the power mapping that takes place in each of these processes. Because one tends to project them as sort of technocratic; you know, we work on these indicators and these people are brought together. But actually what it sounds like to me is that it's like wresting power through those processes to raise the profile of social actors in government and of the social sectors of society that want to make these changes. (Rene Loewenson)

5: Conclusion

The central focus of this meeting was the causes or *determinants of social inequalities in health***.** These are understood as social, economic and lifestyle-related determinants of health that increase or decrease social inequalities in health. All participants took as given that these factors can always be influenced by political, commercial or individual decisions. The key questions for the meeting were more about *how* to tackle them. The sessions dealt with marshalling convincing answers to common contrary arguments; the pros and cons of different policy approaches; consideration of concrete examples of different types of intervention from countries around Europe; and facilitators and barriers to the process of policy implementation.

The main messages coming out of the meeting include:

- Causes of inequalities in health are multiple and inter-related.
- Action to tackle these causes, therefore, also needs to be interconnected, across sectors and intervention levels. There is no single magic bullet.
- A multifaceted approach to reducing social inequalities in health requires political commitment nationally, locally and across parties. Professional capacity building is a useful beginning to facilitate that.
- Mechanisms that are causing social inequalities in health include differential power and resources, differential exposure, differential vulnerability, and differential social consequences; but differential power and resources is the primary one and underlies all the others.
- How these mechanisms operate over time – across the life course and across generations – needs to be understood to identify key policy entry-points.
- There is a paramount need to set a vision for all the efforts in this field. The public health endeavours should not just be seen as concerned with finding a technical fix for a perceived problem, but rather about promoting a vision that all people's health matters equally. The spotlight should be turned on what kind of society we wish to create, what the values are on which our objectives are set and how fair the processes are to ensure that resources for health are allocated equitably.
- Investment in human development is a necessary precondition to equitable economic development.
- Public health strategies in many countries have two main objectives: improving average health of the population as a whole and reducing inequality in health. *Both* objectives need to be met in the most efficient way possible – efficiency in the public health context applies to both targets.
- Interventions that have an increasing differential impact down the social gradient need to be identified. Universal interventions that have a uniform impact across all socioeconomic groups are useful in reducing absolute inequalities. These can be supplemented with selective interventions targeted at more complex situations.

- All policies must take account of differential impacts of interventions on different socioeconomic groups, and not assume that what works for one group will work equally well for all.
- Instead of always trying to invent new initiatives, we should appreciate what is already being done well in terms of tackling the social determinants of inequalities in health. Some existing universal services, for example, cover everyone, but have the biggest benefit for the worse-off. There needs to be more evaluations of such existing policies and programmes.
- The effect of some interventions in this area may be limited because national and international forces are running against the grain of health equity policies. Countervailing forces in some European countries include widening social and economic inequalities in society as a whole and the erosion of provision in the welfare system. We need a rigorous identification of what is making things worse as well as what is making things better.
- So much can be learnt about promising ways forward from continued international co-operation on all the above policy questions, facilitated and led by WHO. Practical attempts to tackle inequalities in health in one country can be taken, appraised and used constructively to move the health equity agenda forward in another. In the words of the Beatles' song: we all need HELP!

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Annex 1 – Summary agenda

Liverpool Expert Group Meeting, 18th - 19th October 2007

Marshalling policy options and examples for tackling social determinants of inequalities in health

Purpose

The Expert Group Meeting focused on policy options and actions for tackling the social determinants of health inequalities. The aim was to develop examples and case studies that can be useful for policy makers and planners at the country level and when WHO and others are working with countries, helping them formulate more equitable public health strategies.

Expected outputs

The outcomes will be a series of concrete examples of policy options and constraints on action to tackle the social determinants of inequalities in health. These will be framed in the policy context of specific countries, giving ideas on what might be feasible policy options for a particular country. The report to WHO from this expert group meeting could - together with the "Levelling Up" reports - be used for policy dialogues with different countries on developing, implementing and evaluating policies to tackle inequalities in health and their determinants.

Specific objectives underpinning all the expert group working sessions:

- To make a distinction between the determinants of inequalities in health and the determinants of population health in general;
- To identify policy options for tackling the social determinants of inequalities in health and highlight how examples of such policies differ from policies to promote population health in general;
- To identify the role that the health sector has played/could play in concrete actions to tackle the social determinants of inequalities in health.

Session One: Identifying the main determinants of social inequalities in health in the participant countries and current approaches to reducing these inequalities

Presentation: Inequalities behind the Rainbow, Professor Margaret Whitehead. Brief resume of the 5 main mechanisms by which social inequalities in health are generated from the determinants of health (taken from Levelling Up Part 2 Report).

General discussion: Participants were asked to comment on these mechanisms and give their considered opinion on what the three main determinants of social inequalities in health are in their home countries/ jurisdiction.

Presentation: From targeting to reducing the social gradient, Professor Hilary Graham. Brief resume of the three approaches to tackling social inequalities in health.

General discussion: The policy implications of focusing on each of these three approaches, facilitated by *country specific case studies of strategic actions from*: Dr Tone Poulsson Torgersen (Norway) and Professor Jennie Popay (UK).

Session Two: Tackling determinants of social inequalities in health - macro-policy environment and multi-sectoral actions

Presentation: Macro socioeconomic strategies for reducing social inequalities in health, Professor Göran Dahlgren. Drawing on Levelling Up Part 2 Report with a special focus on the mutual relationships between economic growth, poverty and social inequalities in health.

General discussion: Focusing on empirical evidence and experiences gained in particular countries on:

- The consequences for health equity of mainly looking upon improved health as a resource for economic growth (including revealing the pitfalls in the economic growth argument).
- The mutual relationships between poverty and health
- The need to look at the health dimension when considering poverty-reduction strategies
- The role of the health sector in breaking the link between health financing and poverty.

This general discussion was facilitated by short presentations from Professor Alan Shiell (Canada), Dr Rene Loewenson (WHO Knowledge Network) and Dr Maciek Godycki-Cwirko (Poland).

Presentation: Multi-sectoral actions to tackle social determinants of inequalities in health, Professor Margaret Whitehead. Drawing on Levelling Up Part 2 Report, with a special focus on the education sector and employment sector.

General discussion: Including examples of:

- the role of different sectors in assessing the health impact of what they are doing and
- the role that the health sector has played in participant countries in collaborating with other sectors to influence social determinants of inequalities in health

This discussion facilitated by short presentations from Dr Joan Benach (Spain), Dr Andreas Mielck (Germany) and Dr Dimitri Gugushvili (Georgia).

Session Three:

Part 1: Tackling lifestyle-related determinants through an equity lens, with special reference to structural factors such as trade policies, taxes and legal measures. A main aim of this part of the morning is to elucidate how such policies differ from general health promotion policies to tackle lifestyle factors.

Presentation: What health problems account for inequalities in the burden of disease in Denmark? How is Denmark responding to this challenge? Professor Finn Diderichsen.

Presentation: Tobacco control polices through an equity lens: Professor Hilary Graham and Professor Margaret Whitehead.

General discussion: Facilitated by short presentations from Dr Alena Steflova (Czech Republic) and Professor Göran Dahlgren (Sweden) about alcohol policies through an equity lens in their own countries.

Part 2: To draw out why some national plans to tackle social determinants of inequalities in health have remained plans, while others have taken off and been implemented.

Presentations: Selected country experiences in implementing strategies to tackle inequalities in health nationally: Dr Bosse Pettersson (Sweden); Dr Tatjana Buzeti (Slovenia); Prof. Aikan Akanov (Kazakhstan); Dr Fiona Adshead (UK).

General discussion: Including examples from participants of why some national plans to tackle social determinants and inequalities in health have remained plans, while others have taken off and been implemented. *What was the particular role of the health sector* in promoting such strategies?

Concluding remarks: Professor Margaret Whitehead.

Annex 2 – Macro socioeconomic strategies for reducing social inequities in health

By Göran Dahlgren, Visiting Professor, University of Liverpool

Paper prepared for the Expert Group meeting on *"Marshalling policy options and examples for tackling social determinants of inequalities in health"*, University of Liverpool, 17-19th October 2007

The macro-policy environment for health

> "Success of a society can be judged from the quality and fair distribution of its population's health" (Commission on Social Determinants of Health 2007, p.2)
>
> "An increase in national income, by itself, does not capture development in its fullest sense. At the least, education and health should be included". (Commission on Social Determinants of Health 2007, p.16)

Very few if any European countries measure development in terms of health and education. The dominant trend, which has been further reinforced for example within the European Union, is that economic growth per se is the most important dimension of development and is even synonymous with development.

The purpose of this paper, which is partly based on a WHO report by Dahlgren and Whitehead (2007), is to raise some key policy issues as related to the mutual relationships between economic growth, poverty and social inequities in health. Special attention is then paid to the role of general economic growth policies rather than means tested and targeted policies. Furthermore, attempts are made not only to focus on the equity in health impact in terms of narrowing the health divide between the upper and lower quintiles of the population but also in terms of "levelling up" the social gradient of health.

1. Economic growth as a determinant of health

There is a mutual relationship between economic growth and health as economic growth can promote health and improved health can contribute to economic growth. This is often presented as a win-win situation.

The reality is, however, often very far from this harmonious "win-win" situation. The reason being that the health impact of different economic growth strategies can be very different and that the economic impacts of improved health also can be very different. This is in particular true when comparing positive and negative effects of different economic growth strategies as experienced by high-, middle- and low-income groups. One reason being that liberal economic policies rarely consider how the initial conditions of inequality within the population affect the possibilities created and the risks generated by different economic growth strategies. These policies have been reinforced in an expanding global economy. Consequently most – if not all – countries in Europe are experiencing increasing inequities in income and

health. From a human development point of view this can only be described as a major failure.

Consequently there is a need for a knowledge-based assessment of the mutual relationships between economic growth and social inequities in health. A useful framework for such analyses is to describe the "health" of different socioeconomic groups as a "stock" whose level depends on the volume and quality of "flows" of different determinants of health. The time lag between macroeconomic changes and actual health outcomes can then be explained by the fact that the stock normally provides a margin of health reserves (Anand and Chen, 1995). This reserve is very limited or non-existent among low-income groups/poor people. They are therefore typically the first to experience the negative health impact of an economic down-turn or crises. In countries with neo-liberal economic growth strategies they are furthermore the last ones to experience the positive effects during periods of high economic growth.

Some of the key policy issues to be focused upon in analyses of the mutual relationships between economic growth and health are presented and discussed below.

1.1. Distinguish between means and ends

Income is of course not an end in itself but a means to ends such as increased wellbeing. This was stated already by Aristotle: "The life of money making is one undertaken under compulsion, and wealth is evidently not the good thing we are seeking; for it is merely useful and for the sake of something else" (cited in Anand, 1996).

These words of wisdom are typically neglected across the globe by economists and politicians focusing on economic growth as an objective rather than a means for promoting human development. Development strategies are thus typically closely related to economic growth objectives rather than improved health and education or other vital dimensions of wellbeing. It is not even stated that economic growth as measured in terms of GDP has no quality dimension. Everything with a price which is sold on a market is given the same value. Using 1 million euro for destroying a road and another million for repairing it has the same value in terms of economic growth as using 2 million euro for building a road.

Nor is it recalled that the GDP measure is totally insensitive as regards the distribution of resources generated. An additional 1000 euro has the same value regardless of whether they are received by a millionaire or a poor family.

It is thus impossible to analyze the effects of economic growth without knowing how resources generated are used. To what extent – if any – do different strategies for economic growth contribute to human development including health? What is the impact of these strategies in terms of reduced or increased inequities as related to different dimensions of human welfare including health? Questions such as these should be the main focus when discussing alternative economic growth strategies.

Economic growth should thus not be viewed as a major objective in its own right but as an important means – resource – for an equity-oriented human development (including health).

1.2. Identify efficient and inefficient economic growth strategies in terms of health.

In the long term the health of populations improves with the economic development of a country. Equally important to recall is that there are major differences in health within countries at the same level of economic development. Conversely some countries with a much lower GDP/capita have achieved a similar or even better health status than countries which have a GDP/capita which is many times higher. Improved health is thus not – as already stated above – a given effect of economic development. The health impact of economic growth depends on how the resources generated are used.

In-depth analyses have revealed that the extent to which economic growth improves health is mainly determined by the extent to which economic resources generated raise the living standards of low-income groups and are invested in public systems for health and education (Anand and Ravillion, 1993). Countries with a better health than expected at a given level of economic development are, for example, among high-income countries the Nordic countries and among low- and middle-income countries Vietnam, Sri Lanka and Costa Rica.

If however economic growth primarily increases the income of already affluent groups and public services for health and education are heavily underfunded then the positive links between economic growth and improved health are reduced or even eliminated (Sen, 2001). Countries with a much lower health status than expected at their level of economic development are for example the United States and Russia. The US being one of the richest countries in the world is only ranked as number 43 among all countries in terms of infant mortality.

Russia has, since the beginning of the 1990s and the transformation from a planned to a market economy, experienced economic growth accompanied by reduced life expectancy. The extent to which the reduced life expectancy observed during this period is caused by exposure to different risk factors before the actual period studied must of course be further analyzed as the lag time can be quite long for socially caused mortality.

It is against this background of critical importance to distinguish between:

- ***a) Efficient economic growth strategies in terms of positive effects on human development (including improved health and reduced social inequalities in health) and***
- ***b) Inefficient economic growth strategies in terms of no or negative effects on human development (including growth with no or negative changes in health and increased social inequities in health.)***

1.3. Efficiency as related to strategies for reducing social inequities in health

Most if not all European countries state as an objective to improve health in general and to reduce social inequities in health. The efficiency of economic growth strategies as related to health must thus be related both to improved health in general and the extent to which social inequities in health are reduced.

Rather than measuring efficiency as related to stated objectives the typical approach is to measure the efficiency of economic growth policies in terms of GDP growth only. Proponents of this stance argue that growth should be optimized first and possibilities to redistribute available resources considered as a second step. This strategy is flawed as the possibilities to redistribute resources in reality often are quite limited at this late stage. In the field of health development this is self evident as health once achieved by a person cannot be redistributed to another person. Reducing social inequities in health can only be achieved by a strategy improving the possibilities to live a healthy life for those at particular risk for poor health and premature deaths.

Given the above stated positive links between economic growth and improved health the most efficient economic growth strategies are likely to be pro-poor and pro–public services for health and education. Equally important is to recall that neo-liberal economic growth policies tend to be inefficient as they are characterized by increasing inequalities in incomes as well as by privatized and market-oriented health and educational systems which primarily can be used by high- and middle-income groups.

Special attention must also be given to the argument that high taxes for financing public welfare systems would reduce economic growth. The empirical evidence for this assertion is weak or none existing in a European context. There is however clear evidence that countries with high taxes and well developed publicly financed welfare systems, such as the Nordic countries, have equal or higher economic growth rates than countries with lower taxes and greater inequalities in income (World Economic Forum, 2005; Palme, 2004). The positive links between a well developed public sector and economic growth have also been increasingly recognized within leading business circles. Efficient public institutions were for example stated – at the World Economic Forum 2005 - as one reason for all the Nordic countries to be among the top ten (out of 117 countries) in terms of competitiveness. It was furthermore concluded that what matters when securing competitiveness is how well government resources are spent rather than the tax burden per se.

The term efficient economic growth strategies should thus always focus on the extent to which stated objectives as regards human development – including reduced inequities in health – are achieved. A further criterion to be fulfilled is that efficient economic growth strategies as defined above also must be sustainable from an environmental point of view. The argument that a well developed welfare system financed via taxes/compulsory social and health insurance systems limit the possibilities for economic growth is not evidence based. Reality as experienced in many European countries is rather that well designed public welfare systems facilitate economic growth.

1.4. ***Efficiency as related to reduction of income inequalities***

It is a well documented fact that individual income is an important determinant of health. It is also a well-known fact that the marginal positive health effects of an additional dollar decrease by increasing income. The health impact of inequalities in income and wealth has also been increasingly recognized, not only by researchers but also among policy makers. The EU Commissioner for Health and Consumer Protection, Markos Kyprianou, highlighted this in a speech at the EU Summit on Tackling Health Inequalities (October 2005) by stating: "With growing inequalities in wealth have come growing inequalities in health. And in turn, inequalities in population health contribute to widening disparities in wealth."

Income inequality may exert an influence on health in several different ways:

- Through the increased burden of poverty. Societies with large income inequalities tend to have a higher percentage of people living in poverty and it is poverty that has an adverse impact on health. An analysis of the Luxembourg Income Study, for example, found a strong positive correlation between the degree of income inequality within a nation, as measured by the Gini index, and the share of children living in poverty (Raphael, 2001). There are however countries, such as Sweden, where child poverty has been reduced during a period of increased income inequalities. The Swedish children who still live in poverty are however experiencing a "deeper" poverty with more severe problems (Salonen, 2003).
- Through psychosocial pathways. Societies with large income inequalities generate more damaging stress levels throughout the population but in particular among those lower down the social scale. These heightened levels of psychological stress, both directly and indirectly via subsequent risk-taking behavior, affect health. (Marmot, 2004; Mackenbach, 2005; Wilkinson, 2005)
- Through public policy pathways. Greater income differentials typically reduce the possibilities for public financing of health and other public services (Lynch et al, 2000). This reduces the economic access to these services among low-income groups and thus limits the positive health effects of these services among those at greatest need for the services.

In addition to equity-oriented economic growth strategies it is important to explore and utilize possibilities to reduce income inequalities through cash benefits, progressive taxes and subsidized public services which are utilized according to need rather than ability to pay. The potential of using these means for reducing inequalities in income can be illustrated by the following example from England. Before redistribution the highest income quintile earned 15 times that of the lowest income quintile. After distribution of government cash benefits this ratio is reduced to 6 to 1 and after direct and indirect taxes it falls to 5 to 1. Finally after adjustment for indirect taxes and use of certain free government services such as health and education the highest income quintile enjoys a final income 4 times higher than the lowest income quintile (Summerfield and Gill, 2005).

It should be noted that these equity-oriented policies as well as wage policies typically are general policies rather that targeted and means tested policies. This universal approach is likely to be of key importance for the achievement of significant reductions of income inequalities and levelling up the social gradient of health.

Furthermore it must be recalled that higher levels of income inequalities reduce the efficiency of economic growth as related to the reduction of poverty and social inequities in health.

The World Development Report from UNDP (2006) summarizes the relationships between inequality in income and poverty as follows:

a) "Declines in income inequality accelerate the rate of poverty reduction"
b) "The higher the initial income inequality the lower is the effectiveness of future economic growth in lowering absolute income poverty."

Given that relative poverty/income differences are important causes of social inequities in health these conclusions are obviously very important also when formulating strategies for tackling social inequities in health.

Economic growth strategies which maintain or increase substantial inequalities in income are thus inefficient from a human development/health point of view and directly counterproductive in terms of reducing social inequities in health. Equally evidence based is that reducing inequalities in income along with economic growth accelerates the rate of poverty reduction. Consequently such equity-oriented economic growth strategies are highly efficient in terms of human development including better and a more equal health status within the population. (For a discussion on policy options for reducing income inequalities see Dahlgren and Whitehead, 2007)

1.5. ***Develop and apply specific indicators and index for measuring human development***

There is an urgent need for a straightforward set of indicators and/or index which can capture changes in human development (including health). The need for such an index is increasing within a European context as the positive linkages between economic growth and wellbeing are weakened or have ceased altogether. Long-term studies of economic growth and wellbeing have for example showed that perceived wellbeing has not increased since the Second World War in high-income countries in spite of substantial increases in GNP per capita. The same type of studies has also revealed that wellbeing does not increase in a longer term perspective among persons who have had substantially increased incomes (Vogel et al, 2005). This "contrast between the material success and social failure of modern societies is" – as expressed by Richard Wilkinson – "a profound paradox and we have little understanding of the causal processes responsible for it" (Wilkinson, 2005).

There are from a professional point of view many good alternative methods to measure changes in human development/wellbeing.

The Human development Index as developed by UNDP can be one option. This index is based on the average of the following three indicators which classify countries on a scale of 0 to 1:

- GDP per capita (expressed in purchasing power)
- Life expectancy at birth
- Knowledge index (combining adult literacy rate and the gross enrolment ratio in schools).

One shortcoming of this index is however that it is mainly used for ranking countries. An improved position in one country can then be achieved without any improvements if some other countries are experiencing negative trends in terms of for example economic growth or the health status of the population.

It may also be better to focus on human development indicators only rather than mixing economic growth figures (i.e. a resource) with outcome indicators in terms of health, education, etc. Furthermore, it is important that the index used for measuring human development also take into consideration the social distribution of health, education, etc.

The Human Poverty Index captures many of these dimensions as it is based on:

- Probability at birth of not surviving to age 60
- Percentage of adults lacking functional literacy skills
- Percentage of people living below the poverty line
- Long-term unemployment

The difference in position of a country when measuring in terms of GDP/capita and the Human Development Index and the Human Poverty Index respectively can be illustrated by the fact that Sweden is ranked as no 3 in terms of Human Development Index and as no 1 in terms of the Human Poverty Index but as no 18 when ranked according to GDP/capita (UNDP, 2003).

One alternative to this type of index could be to identify one single indicator for social progress/human development.

Given the fact that health status in general, and social inequities in health in particular, reflect differences in people's living conditions one such single indicator of social development could be "the health status of the poorest 20 percent of the population and how it changes over time as compared with the rest of the population". This type of indicator – which was endorsed by the World Health Assembly already in 1986 – could, when further developed and tested, be of particular importance from a health equity point of view. The reason being that the magnitude of social inequities in health is then focused upon both as an indicator of social development and as related to equity in health objectives.

High priority should be given to the development and use of indicators and/or index capturing, in operational and political relevant terms, changes in human development (including health) in general and in particular changes as experienced by men and women respectively in different socioeconomic groups. Changes in health status of low-income groups as compared with the rest of the population can then be indispensable criteria both when formulating national development policies and strategies and in evaluating their outcomes.

2. Health as a determinant of economic growth

2.1. *Health-related productivity gains among working age populations*

Improved health can be an important determinant of economic growth, when it increases labour productivity, labour supply, educational achievements and savings. This perspective of seeing improved health as a factor promoting economic growth is further reinforced by the high costs to society and business of poor health.

In Britain, for example, 35 million working days were lost overall in 2004; 28 million to work-related ill health and a further 7 million to workplace injury. This cost the economy between £13 billion and £22 billion, and cost the affected workers between £6.3 billion to £10 billion (Health and Safety Executive, 2005).

The importance of improved health in an economic development perspective can also be illustrated for the Russian Federation where a reduction in non-communicable diseases and accidents to the same level as that of western European countries would correspond to nearly 30 percent of the 2002 Russian GDP (World Bank, 2005).

While it is important to recognize that improved health can promote economic growth it must also be firmly stated that priorities as regards investments in health should not be guided by the economic impact of different alternative policy options. Improved health and reduced social inequities in health must be seen as objectives in their own right. This is of particular importance when formulating strategies for reducing social inequities in health as the productivity gains are valued in terms of income. The higher the income of a person the higher the productivity gains when he/she can return from a spell of poor health to their jobs. If investments in health are guided by productivity gains calculated as described – which is the standard method – priority should obviously be given to high-income rather than low-income groups. Furthermore priority should be given to groups with a strong position on the labour market rather than to groups experiencing a higher risk of unemployment. Most importantly is however that old age retired persons – who typically have the greatest need for health services – would be given lower priority than working age groups if investments in health are guided by productivity gains and impact in terms of economic growth.

Priorities as regards investments in health should thus never be based on assessments of the extent to which they contribute to economic growth. The positive effects of improved health in term of economic growth should – at a given health policy – be described as positive side effects.

2.2. *Economic gains of reducing social inequities in health*

Strategies for reducing social inequities in health among the working age population are, however, when combined with equity-oriented health policies for children and the elderly, a viable option for promoting economic growth. This is because improving the health of low-income groups faster than the health of high-income groups does not imply any risk of discriminating against weaker, less productive groups. Within this context the health of the working age population and economic growth improve together. The economic impact of improved health among low-

income groups/reduced social inequities in health can then be related to the following pathways:

- increased labour supply (individuals in good health have a better chance of getting a job which increases the number of people working and/or the number of hours worked increase)
- increased productivity (individuals in good health are more productive per hour than unhealthy people as they experience fewer days off due to sickness and have more energy to put into their work)

The magnitude of the economic gains of equity-oriented health policies within the European Union (EU-25) has recently been estimated in in-depth analyses by Professor Johan Mackenbach et al (2007). The main findings of this study – based on data from 2004 - can be summarized as follows:

- The number of deaths that can be attributed to inequalities in health in the EU-25 as a whole was estimated to 707 thousand per year. The number of life years lost due to these deaths is about 11.4 million.
- The number of prevalent cases of ill health that can be attributed to health inequalities is estimated to more than 33 million.
- The annual losses in terms of labour productivity due to social inequities in mortality and morbidity were estimated to €141 billion or 1.4 of GDP.
- The annual impact of socioeconomic inequalities in health on costs related to social security, health care systems and health care support was estimated to around €1,000 billion or 9.5 percent of GDP. In a separate calculation inequality-related losses to health account for 15 percent of the costs of social security systems and 20 percent of the costs of health care systems in the European Union as a whole.

Given the magnitude of these losses due to social inequities in health and the fact that inequities in health are socially produced and thus liable to change, the economic benefits of reducing social inequities constitute another main incentive for giving a priority to equity-oriented health strategies. Even rather marginal reductions constitute major gains both in terms of improved health among those with the higher disease burden and in terms of economic growth and money saved as related to social security and health care.

Equity in health strategies should therefore always be an integrated part of strategies for economic growth in high- as well as in middle- and low-income countries in the European Region.

3 Poverty and health

Poverty is a determinant of poor health and poor health can be a determinant of poverty. Equally important to recall is that improved health can be a way out of poverty. These links between poverty and health must always be considered in all strategies for reducing social inequities in health as well as in strategies for poverty alleviation. The purpose of this section of the paper is to briefly highlight some key

policy issues as related to the health dimension of poverty reduction and the poverty dimension of strategies for tackling social inequities in health.

3.1. ***Poverty as a cause of poor health***

Historically and globally, poverty has been and still is the main direct and indirect cause of poor health and of social inequities in health. The poor cannot afford to live a healthy life.

Relative poverty and in some countries also absolute poverty is still also, in a European context, an important determinant of social inequities in health. This negative impact of poverty on health increases with increased market-oriented policies for essential services such as health, education, housing, electricity, water and public transport. Families and individuals living on an income around or below the national poverty line cannot afford to pay high user charges or the full market price for these services. This in turn reduces their possibilities to live a healthy life. The differential impact of poverty further reinforces the negative effects of poverty on health as increased poverty is related to increased vulnerability. Synergetic effects – that is that the poor experience many risk factors at the same time that interact and reinforce each other – are also contributing to an increase of social inequities in health.

The health impact of poverty can be quantified by estimating the number of lives that would be saved by preventing poverty. For example, in the United Kingdom it has been estimated that eliminating child poverty would save annually the lives of 1400 children under 15 years of age.

It is against this background of critical importance – as already stated above – to assess if and to what extent different economic growth strategies reduce or increase absolute and relative poverty.

The United States, with the second highest per capita GDP among all OECD countries, had for example in 1990 the second highest proportion of child poverty (19 percent of all children). The economic development indicators have since then been quite positive with low inflation and per capita incomes increasing by at least 2 percent per year. In spite of these very positive achievements in terms of economic growth the proportion of children living in poverty is roughly the same as 15 years earlier (Oxfam, 2000).

Pro-health equity policies, such as welfare programmes, the provision of a universal safety net, strict health and safety standards, family friendly labour policies, active employment policies and provision of good quality health, education and other social services, are on the other hand strongly related to low levels of child poverty (Lundberg et al, 2007).

Health professionals in general and public health experts in particular should thus know as much about possibilities and constraints to reduce or eliminate poverty as they know of any other major strategy to improve health and reduce social inequities in health. The health impact of poverty reduction should also be recognized by other professional groups working with poverty alleviation policies and programs.

Together they should be able to estimate the health impact as related to men and women in different socioeconomic groups of, for example:

- The elimination of child poverty
- Tax credits for low-income families
- Minimum salary levels that reduce the risk of being "working poor"
- Reducing or eliminating gender specific differences in income
- Securing or expanding child care or preschool care, which increases the possibilities for parents to earn an income from work outside the home
- Adult education and other life-long opportunities to "catch up" and/or learn new skills
- Social welfare benefits and old age pensions at different levels.

Poverty impact analyses should be applied to all policies of relevance for the living standards of low-income groups/poor people and in particular to children living in poverty. This does not imply that policies should be targeted towards these groups but rather that general policies should meet the needs also of people living in poverty.

It is then important to try to distinguish between short- and long-term poverty as many are moving in and out of poverty. Special attention, from an equity in health perspective, should be given to those experiencing long-term poverty.

Furthermore diseases which are most common among low-income groups/the poor and which are directly or indirectly related to low income/poverty should be classified as "poverty-related diseases." The present tendency to call – within a national context – diseases such as cardio-vascular diseases and diabetes "welfare diseases" is directly misleading.

Absolute and relative poverty are determinants of social inequities in health which should be recorded and analyzed as any other major determinant of poor health and of health inequalities. Diseases directly or indirectly linked to low income/poverty should be classified as "poverty-related diseases".

Strategies for poverty alleviation should – from an equity in health point of view - be related to equity-oriented public health strategies such as healthier working conditions, tobacco control, alcohol policies and efforts to reduce obesity. The reason being that low income/poverty is a cause of many other causes and also is related to so called lifestyle risk factors.

3.2. *Poor health as a cause of poverty*.

Poor health can, even in European countries, be an important cause of poverty. The pathways from poor health to increased poverty may be reduced income while at the same time expenditures for medical care and drugs constitute a major additional burden of payment.

From a health sector perspective it is important to recall that market-oriented strategies for health care financing increasing the share of private payments can change a health care system from being a system generating welfare and improved health to a system generating poverty and reinforcing poverty-related diseases. This

may be – as briefly described below - the outcome both of reduced access to essential health services and when patients are driven into serious financial problems and even poverty due to high medical expenses.

Limited economic access to essential health services and drugs

It is a well-known fact that those with the greatest need for care typically have least access to the care they need and vice versa. The health impact of this "inverse care law" is likely to be significant in countries where people with a low income cannot afford to demand the health services they need. Their possibilities to work and earn an income are then, over a period of time or permanently, reduced or even eliminated due to prolonged periods of poor health. This may in particular be the case when they cannot afford the rehabilitation they need. Limited economic access to essential health services can thus - in particular for low-income groups - be another cause of increased poverty.

This is very likely to be the case in for example Armenia, Georgia and the Republic of Moldova where over 50 percent of the population do not seek care when ill due to an inability to pay. The share who cannot afford to pay for the care they need is of course much higher among low-income groups, i.e. those groups with the highest need for these services. 70 percent of the poorest fifth of the population in Kyryztan and Tajikkstan could for example not afford to by prescribed drugs (Walters and Suhrcke, 2005).

A 2005 report from the WHO European Office for Investment in Health and Development concluded that financial barriers were the most important limiting factor in health care accessibility in the Countries of central and eastern Europe (CCEE) and the Commonwealth of Independent States (CIS) and that this problem has been reinforced during the transitional period from a planned to a market economy as state funding of health services has been reduced and high formal as well as informal payments increased (Walters & Suhrcke, 2005).

Limited economic access to health services and essential drugs is also a growing problem in many western European countries as an increasing proportion of total health care costs is privately financed (paid out-of-pocket or via a private health insurance). For example, a quarter of a million Swedes reported that they could not afford to purchase prescribed medicine and 23 percent of the population could not during a year seek needed dental care due to economic reasons (National Board of Health and Social Welfare, 2002). Recent in-depth studies in Sweden have also revealed that 60 percent of those with economic problems did not buy prescribed drugs due to economic reasons (Wamala et al, 2006).

Assessments of unmet needs due to limited economic access to essential health services and drugs must therefore also be included in poverty reduction strategies. Strategies for health care financing should then be discussed both as an integrated part of strategies for reducing social inequities in health and strategies for poverty alleviation.

3.3. ***The medical poverty trap***

More than 100 million individuals globally are impoverished through high direct private payments for health services and drugs (Xu et al, 2007).

High out-of-pocket payments for essential health services and drugs can – in particular among low- but also middle-income groups in high-income countries – cause a major financial problem which may even push families into poverty.

The long-term impact of high medical expenditures on poverty was summarized as follows in the final report from the Commission on Macroeconomic and Health initiated by WHO:

> "The economic consequences of a disease episode on an individual household can be magnified if the cost of dealing with the illness forces a household to spend so much of its resources on medical care that it depletes its assets and debts are incurred. This may throw a household into poverty from which it cannot escape and which has ramifications for the welfare of all its members …This depletion of productive assets can lead to a poverty trap (i.e. persisting poverty) at the household level even after the acute illness is overcome since impoverished households will have a hard time re-capitalizing their productive activities." (Commission on Macroeconomics and Health, 2001, p.32)

This medical trap is not only a reality in low- but also middle- and high-income countries. Nor is it a problem only for low-income but also for middle- and high-income families in countries with a health care system mainly financed via private health insurances and/or high out-of-pocket payments. High medical expenses are, for example, an important cause of personal bankruptcies within the market driven health care system in the United States. Furthermore the typical positive correlation between economic development and public financing seems in some countries to be weakened and even reversed.

To assess when a certain level of health care expenditure is unaffordable it is useful to express private health care expenditures for care per year or per month as a percentage of available household income or budget. This type of analyses by socioeconomic group in Kazakhstan revealed that poor patients in need of hospital care spent the equivalent of more than double their monthly income for this care (Lewis, 2000).

As hospital care is quite unusual it is important also to analyze total out-of-pocket payments for primary care and drugs, which often constitute a major financial burden in particular in low-income groups where the need for care typically is many times greater than among high-income groups.

High levels of private payments may in a macro national perspective also indicate that affluent groups spend very much on private care. The magnitude of the medical poverty trap must therefore be assessed in a household budget perspective.

Equally obvious is that low levels of private spending in a poor population can either reflect a fair financial system for public health services or that low-income groups

have very limited access to services. Consequently economic access and the burden of payment must be analyzed at the same time.

When assessing possibilities to reduce the burden of payment among low- and middle-income groups the main option is of course to increase the share of public funding while at the same time develop systems for resource allocation related to the need of care.

A starting point for such analyses can be assessments of the extent to which different socioeconomic groups at present benefit from existing public subsidies. The typical pattern in many countries is that most of these benefits are captured by groups of people who are better-off. This, for example, is the situation in Armenia where the poorest fifth of the population used only 13 percent of total public health care expenditures while the richest fifth used nearly 40 percent (World Bank, 2002).

It is also important to explicitly recall that a shift from public to private financing – at a given level of utilization of health services – means that those with a greater need of care (the elderly, women, low-income groups) have to pay more while population groups with a smaller disease burden (working age, men and high-income groups) pay less. This is a normal and expected effect on a market where you pay for what you buy/use. It is however contrary to a fair financing via taxes or compulsory social health insurance where you contribute according to ability to pay and use health services according to need regardless of taxes/compulsory health insurance premiums paid.

These distributional effects of increased private financing within public health services via different types of user charges are rarely considered when suggestions to increase user charges often are motivated by the fact that the average income has increased which is "making it possible for people to pay more". It is also often stated that those who pay high user fees – regardless of financial and social consequences for the patient and his/her family – can afford to pay the fees charged. Consequently those paying prove that high user fees are not a problem from their point of view.

It must also be recalled that historically public funding of health services has proved very effective in breaking the links between poor health and poverty across Europe. Poor health is - in most European countries – no longer an important cause of major financial problems and poverty. Present trends within an increasing number of European countries, where financial support systems are weakened and private payments for health services and drugs increased, are however bringing back the old threat of poor health leading to poverty among low- but also middle-income groups/families. These types of market-oriented reforms can thus not be categorized as progress but a return to the time before the welfare state. They often threaten the human right to best possible health. This has been expressed by WHO as follows:

> "Human rights are not available for profit. Health care cannot be freely commercialized and sold to the highest bidder or dispensed according to ability to pay. The experience of health care vividly demonstrates that what is profitable is not always what is good, and that those who need health care most are often those who cannot pay for it." (WHO, 1995, p.5).

Public financed health systems via taxes and/or social health insurance systems thus constitute a corner stone both from an equity in health and poverty alleviation point of view.

Highest possible priority should therefore be given to secure/develop tax and/or public social health insurance systems where those with a limited disease burden subsidize those unfortunate to have a heavier disease burden*. (For specific policy options see Dahlgren and Whitehead, 2007)*

3.4. Improved health as a way out of poverty

Poor health constitutes one of many barriers for low-income/poor people to get a job and to capture the benefits of pro-poor economic reforms. Improved health increases the possibilities for people to participate in society with potential positive consequences for economic performance. (Commission on Social Determinants of Health, 2007).

It has even been shown

> "that investments in health of the poorest segments of society, or the marginalized that exhibit serious symptoms of ill health, is a precondition for enabling these individuals and populations to move out of their difficult situation and increase their prospects of engaging in productive activity" and "foster social cohesion" (WHO, 1995, p.17).

These links at the household level between improved health and increased possibilities to break the vicious circle of poverty and poor health are to be found from birth to old age. Children in poor families with healthy parents are more likely to have a better start in life than children of poor parents who are experiencing for example mental health problems or alcohol-related diseases. Also poor children who are healthy are likely to have better results in school than poor children who are sick. Moreover, a poor but healthy person has a better chance to find a job when leaving school than a poor unhealthy person, and so on.

It is in this perspective – making unhealthy people healthier – that access to affordable essential health services and drugs prove to be of particular importance. Comprehensive primary health services is thus an important entry-point for breaking the evil circle of poverty and poor health as it can reduce the negative health impact of poverty while at the same time empower people to work their way out of poverty.

The potential of improved health by reducing/eliminating social inequities in health within EU-25 has recently been assessed (Mackenbach et al, 2007). These analyses showed that if the 50 percent of the population with less good health achieved the health status already achieved by the "better-off" half of the population then 844 million years of life would be saved each year and 2,358 million years of poor health saved. The benefits from a household/individual perspective of these health gains are of course very significant both in terms of improved wellbeing and in terms of increased social and economic productivity.

Strategies for reducing poverty which do not include the heath dimension of poverty alleviation are likely to be far less effective than those which include equity-oriented

health policies and actions. Reducing poverty and efforts to reduce social inequities in health are in fact mutually reinforcing and should be a focal point in all social and economic development policies.

Investments for reducing social inequities in health should therefore be at the very center of any comprehensive poverty-reduction strategy. Special efforts should then be made to reduce chronic and disabling diseases which usually have the most severe financial consequences for low-income groups/the poor.

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Annex 3 – Prioritizing equity in the burden of disease: Seven analytical steps

By Finn Diderichsen, Karsten Thielen

A short note for the Liverpool CC Expert Group Meeting 17-19th October 2007

When societies are pursuing the twin goals of improving population health in average and at the same time reducing social inequalities in health the question arises as to what extent the relative emphasis on the two goals influences the priorities that should be made in health policy. If health equity is a priority, what are then the priorities to be made in terms of diseases, risk factors and intervention strategies? This short note highlights seven analytical steps that can be taken with the help of WHO's work on the burden of disease. Empirical examples are from Denmark – a small, rich, equal but unhealthy Nordic welfare state.

1. The three targets on tackling health inequalities

Many national health policy documents are still mixing up three different concepts and understandings of social inequalities in health, which Hilary Graham [1] however has clarified:

1.1 Remedying the absolute health *disadvantage* among the poor.

1.2 Narrowing health *gap* between these poor groups and the better-off.

1.3 Reducing the health *gradien*t across all socioeconomic groups in the population.

These three approaches can be seen as placed on a continuum, which runs from improving the health of the poor, through narrowing the gap between the poor and more privileged groups, into dealing with the size of the effect of declining social position on health across the whole population. In this view it is logical to argue that they must build on each other in a gradually rising level of ambition [1, 2]. This is a reasonable standpoint if the causal mechanisms of the three phenomena, and therefore the relevant interventions, are rather similar and more a question of degree. If however causal mechanisms are different it might be important to keep the different approaches separate. To what extent the health status of the poor and socially excluded groups are generated through different mechanisms than those generating the gradient might depend on the context, and be different across societies. In those universal welfare states where poverty and unemployment rates are kept low, selected groups might dominate the poor. It will typically be those marginalized from the labour market, universal insurance systems and family support – due to serious disabling mental conditions, addiction or illegal status as immigrants. In other societies where poverty is much more prevalent, it might be much more "normal" for workers,

single mothers and pensioners to end up in poverty and exclusion for longer or shorter periods.

2. What aspects of health should be levelled up?

In an epidemiological framework it is reasonable to consider whether we are aiming at reducing

2.1 Inequalities in the exposure to *determinants* of health or rather *causes* of disease.

2.2 Inequalities in the occurrence of *disease.*

2.3 Inequalities in the *consequences* of disease (survival, disability, participation in labour market and social life).

Whether that is an important distinction or not depends on whether the distribution of determinants translates proportionally into disease occurrence, and disease occurrence translates proportionally into different consequences of disease. Empirically there seem to be indications that this is not the case.

Table A3.1: Prevalence ratio (age and ex standardized) between those with less than 10 years education and more than 12 years, for three risk factors and increasingly serious levels of illness. Denmark 2005 except for smoking and overweight since induction time is assumed. Source: National Health Survey. NIPH Copenhagen 2007.

	Prevalence ratio <10 / >12 years education	**Prevalence %**
Daily smoking (1987)	1.29	44.1
High alcohol consumption	0.84	14.2
Overweight (1994)	1.45	37.8
Any health complaint last 2 weeks	1.01	79.8
Long standing illness	1.38	39.0
Limiting long standing illness (LLSI)	1.77	24.8
Left labour market with LLSI	2.77	8.9

The social inequality increases along the causal path from the unequal exposure to major risk factors, and further on to unequal prevalence of long standing illness, and to increasingly unequal and serious consequences of illness (see Table A3.1). The fact that the relative inequality increases for each step in this pathway illustrates that social position, and determinants associated with it, has an impact on each step in the pathway interacting with other determinants and disease stages in producing the next step (see further 3.3 and 3.4).

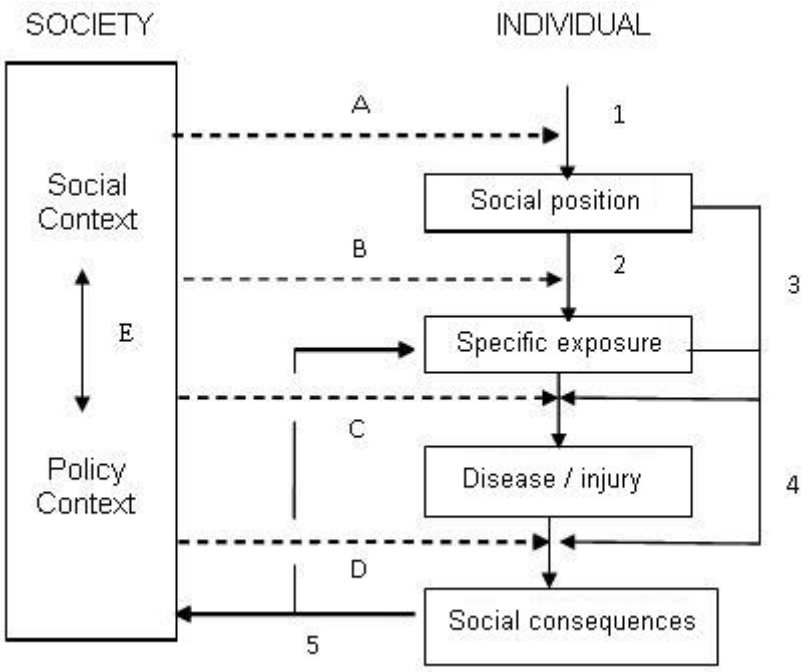
There are two major conclusions to be drawn from this simple fact. One is that equity-oriented policies and interventions should be concerned with reducing inequality in the more serious consequences of illness, such as mortality and

disability, and priorities be made out of an understanding of the relevant causes for inequality in these aspects of burden of disease. Levelling down exposures to risk factors, or levelling down unequal incidence of disease will not ensure equality further down the pathway. Another conclusion is that a more detailed understanding of these mechanistic pathways will be helpful in designing adequate policies and making priorities among different types of interventions within them.

3. Causal mechanisms – a model

A model that fleshes out the main pathways generating health inequality and the policy entry-points modifying them is outlined in Figure A3.1 [3].

***Figure A3.1*:** A model for causal pathways (1-5) from social context of societies and social position of individuals to health outcome. Entry-points for policy (A-E).



The model includes five mechanisms (1-5) linking individuals' social position, and societies' structural and cultural context to the occurrence of diseases and injuries and their causes and consequences.

3.1 *Social stratification*: Societies allocate power and wealth to social positions and individuals will, depending on their social background, education, age, sex, ethnicity etc., compete for and occupy these positions. Social heritage, educational attainment, sex, ethnicity etc. are thus determinants of individuals social positions and policies might aim to ameliorate their effect[3] (See arrow 'A' in Figure A3.1).

3.2 *Differential exposure*: Depending on individuals' social position in society they will, to varying degrees, be exposed to a large number of physical, chemical, psychosocial, behavioural and biological exposures with causal impact on disease and injury risk. This is the basic mechanism of social inequalities in health [4, 5].

3.3 *Differential vulnerability/susceptibility*: The effect of (or susceptibility to) a specific exposure in a social group is depending on how much that group is exposed to other interacting causes of the same disease. As many risk factors in living conditions and health behaviours tend to cluster in lower socioeconomic groups the absolute effect of a single risk might be stronger in those groups (see further 5.2).

3.4 *Differential consequences.* Disease consequences in terms of mortality, disability and limited participation in the labour market and social life is important for prioritizing between health problems and will normally be influenced by social position and specific exposures [6].

3.5 *Impact of consequences*: Some socioeconomic consequences might influence the further course of a disease. For some disorders, such as mental disability and addiction, the social and economic consequences might be particularly serious and long standing. A vicious circle of social causes and consequences of disability might push people out into poverty and social exclusion. On the macro-level the burden of disease and inequalities might have economic consequences for the labour market and public spending [7, 8].

Referring back to the distinctions made in section 1, the social gradient (1.3) in health is primarily generated by differential exposure (3.2) and the clustering and interaction (3.3) of determinants along the social gradient, while the poor health of the poor groups (1.1) to a large extent might be generated by social consequences of disability and the vicious circle it generates for certain disorders (3.4 and 3.5).

4. What health problems constitute the gradient and the gap?

After these more theoretical preludes the next three analytical steps will need to be fuelled by some national or local epidemiological data. As noted in section 2 priorities should be concerned with inequalities in consequences of disease such as mortality and disability. The disability adjusted life-years (DALY) represents such a metric that makes different diseases and injuries quantitatively comparable. The problem is that only a few studies have analyzed the social inequality in burden of disease.

We have here applied a simplified version of Ljung et al's calculation [9] and in this case for Denmark[b]. It builds on the following elements:

[b] http://pubhealth.ku.dk/asm/sund/daly/

- The burden of disease for Denmark is taken from WHO's GBD figures from 2002[c]
- Based on calculations from national in-patient and mortality registers, and national health surveys, we have calculated an age adjusted risk-ratio for the 50 major disorders. The gradient is indicated by comparing the 50% of the population with 12 years of education or less, and the 50% with longer education according to the ISCED-classification.
- The burden of disease for these two halves of the population is then calculated for each disorder and added up. The difference between them is then denoted the "gradient" and the WHO figures for the whole population denoted the "average" in Table A3.2. It is in this context crucial that inequality is measured on an absolute scale [(16)].
- We have in a similar way calculated the burden of disease that fills "the gap" between the 5% of the population who are welfare recipients, and the rest of the population (here limited to age 0-64), as pensioners very seldom receive welfare benefits in Denmark (see Table A3.3).

Table A3.2: The 10 major disorders ranked after their contribution to the social gradient in burden of disease here measured as the difference between the highest educated 50% and the lowest educated 50%. The average burden (ranking the average in brackets). Denmark 2002 (preliminary calculations). DALY per 100.000. Men and women, all ages.

	The Gradient	**The average**
COLD	9.5	10.7 (2)
Depression	7.6	11.4 (1)
Alcohol use disorders	3.7	6.6 (4)
Ischemic heart disease	4.0	8.6 (3)
Lung cancer	2.6	4.8 (6)
Stroke	1.9	6.6 (5)
Dementia	1.6	4.7 (7)
Diabetes	1.5	2.9 (9)
Hearing loss	1.4	4.4 (8)
Illicit drug use disorders	1.3	1.3 (15)
All diagnoses	41.1	140.2

4.1 It is clear from Table A3.2 that 86% of *the gradient* is constituted by these 10 disorders – 6 somatic and 4 mental disorders - COLD, IHD, stroke lung cancer, diabetes and hearing loss along with depression, alcohol and drug

[c] http://www.who.int/healthinfo/bodestimates/en/index.html

addiction and dementia. The gradient thus seems to be dominated by a much smaller spectrum of disorders than the average burden. But the list of the ten major disorders behind the gradient are no different from the ten disorders dominating the average. The ranking between them is however slightly different.

***Table A3.3*:** The 10 major disorders ranked after their contribution to the gap between welfare recipients and the rest of the population Denmark 2002 (preliminary calculations). DALY per 100.000. Men and women, 0-64 years.

	The Gap	**The average**
Depression	42.7	13.5
Alcohol use disorders	31.5	8.2
COLD	20.8	7.6
Schizophrenia	11.5	1.8
Illicit drug use disorders	10.1	1.7
Suicide	8.3	2.7
Obsessive/compulsive disorders.	4.8	1.6
Diabetes	4.4	1.6
Cirrhosis of the liver	4.3	2.4
Traffic injuries	3.1	3.3
All diagnoses	159.7	107.0

4.2 Two thirds of *the gap* (Table A3.3) between poor welfare recipients and the rest of the population is dominated by six mental disorders and addiction, including depression, alcohol and drug addiction, schizophrenia, anxiety and suicide. The six diagnoses constitute only one quarter of the burden on the general population in the same age group. This indicates that the gap is constituted by a somewhat different spectrum of disorders than the gradient and is linked much more to the mechanisms 3.4-3.5 above. While policies directed towards the gradient might focus on interventions levelling down the exposure of the major causes of the 10 disorders, the interventions against the gap might have to focus much more on psychiatric rehabilitation, and policies to improve socioeconomic conditions for this group of patients.

5. What are the determinants of the gradient?

5.1 Attributable burden

It is clear from the model in Figure A3.1 that the major types of intervention against the gradient should be to level down the population exposure to the causes of the diseases constituting the gradient (see 3.2, 4.1 and arrow 'B' in Figure A3.1). So there are reasons to calculate the fraction of burden attributable to different risk factors for the population as a whole and for different socioeconomic groups separately. We have again used the technologies developed by WHO [10], but in a more simplified version[b] as we don't have access to the toolkit. We have, however extended the methods to be able to estimate the role played by different risk factors in generating the social gradient in disease burden.

Age- and sex-specific relative risks for a range of environmental, behavioural and biological risk factors have been applied together with national figures on exposures levels across the same two socioeconomic groups (see section 4) divided according to length of education. We assume identical relative risks for the two socioeconomic groups. This is an assumption that in general fits well with several empirical studies [11], but there might for certain exposures be exceptions. The preliminary model is available on the net[b].

With these two inputs we can calculate the *population attributable fraction* of burden for each risk factor and disease in each socioeconomic group. The change in difference between groups in overall burden before and after subtracting the attributable fraction for each risk factor is then showing how much the absolute inequality in burden can be reduced by removing each risk factor. This type of calculation only considers the effect of risk factors on incidence and not their effect on duration, survival and disability. The effects are therefore somewhat underestimated.

Table A3.4: Population attributable burden (%) of disease for some risk factors in Denmark 2000. Calculated as part of the average and as part of the gradient. Men and women all ages.

	The gradient	**The average**
Smoking including passive smoking	52.2	17.6
Alcohol	16.5	10.2
Physical inactivity	13.0	6.6
Overweight / Obesity	6.1	1.9
Nutrition	7.2	5.5
Physical working conditions	15.4	3.4
Psycho-social working conditions	18.8	2.8
Childhood conditions	10.3	2.3
All diagnoses (DALY per 100.000)	41.1	140.2

Two risk factors – smoking and alcohol - ranked highest in relation to the average burden, are dominating the gradient too. Smoking is in Denmark particularly dominant after many decades of liberal tobacco policies. In that respect smoking and alcohol are priorities for tackling the average burden as well as the gradient. There is in this sense no obvious case for a trade-off between equity and effectiveness in Danish health policy. Some other exposures related to working environments and childhood conditions do not explain large proportions of the average burden, but do explain much larger proportions of the gradient.

5.2 Clustering and interaction

Many of the specific exposures that are mediating the effect of social position on health are increasingly characterized by a tendency to *cluster* in lower socioeconomic groups [12]. In addition they might cluster further since they influence each others occurrence, e.g. psychosocial exposures influence health behaviours; overweight and physical inactivity influence each other. They often also *interact* since they influence each others' *absolute* effect on health outcomes. Examples of this are lipids, smoking, blood pressure and diabetes, which all increase the absolute effect of each other on cardiovascular events [13]. Life course epidemiology also provides several examples where early exposures amplify the absolute effect of later exposures [18]. The *relative* effects, however, tend to be rather independent of the exposure to other risk factors in the pathway [13], and to be independent of context [10]. This is the general empirical rule, but not without exceptions.

These phenomena have two important implications:

> Universal interventions reducing one or more risk factors to the same degree in all socioeconomic groups will have a stronger impact on health in lower socioeconomic groups, since the attributable fraction will be the same across groups, but the absolute number of avoided cases will be higher in the groups starting with the higher incidence.
>
> The other implication is that clinical high-risk strategies, for example those based on risk factor scoring of absolute risk for cardiovascular events where combinations of risk factors are explicitly addressed [14], will have a strong impact both on average [15] and on inequality [16], even when the interventions accomplish the same absolute reduction in exposure in all socioeconomic groups.

6. Approaches and strategies

A key distinction in both preventive medicine, health policy and in preventive social policy is between universal, population-based policies and interventions versus those targeted to high-risk individuals. This choice is partly determined by political priorities and welfare state models [17], but arguments pertaining to effectiveness and equity have also been raised by G Rose and others [15]. Rose's argument for population strategies was based on an analysis of a single risk factor, se-cholesterol. But if combinations of the four major risk factors are

considered, high-risk strategies might have a deep impact on population health, including the gradient [13, 14, 15].

If we combine this distinction with the distinction made in section 1 between the gradient and the gap we get four combinations that illustrate four important strategies to tackle inequalities in health. They all have relevance in a Danish context since all four types represent typical activities where the political and financial responsibility lies with the local governments.

Table A3.5: Examples of four types of intervention strategies, combing equity targets and prevention strategies

	Universal population-based interventions	**Targeted high-risk interventions**
Tackling the gradient	(6.1) Universal prevention e.g. Price, legislation	(6.3) Screening and treatment for e.g. CVD risk factors
Tackling the gap	(6.2) Universal social policy family and labour market policies	(6.4) Rehabilitation of e.g. mentally disabled

6.1 Universal health policies addressing the whole population, irrespective of social position, such as price policies, work environment legislation and local enforcement, school policies for drugs and physical activity, traffic regulations, information campaigns, etc. If exposure levels to the specific mediating exposures through universal interventions are reduced to the same degree across socioeconomic groups, inequality will normally be reduced (see 5.2). Often, however, interventions have differential effectiveness across social groups. Price elasticity is e.g. higher for low-income groups but campaigns tend to work better among the better-off (see 7.2).

6.2 Universal social and labour market policies have proven effective in reducing poverty and social exclusion and are therefore important in terms of reducing the size of the target population focused on in tackling the gap [17]. Flexible labour markets such as those seen in UK and Denmark ('Flexicurity') might tend to work in the opposite direction. Recent data from EU-surveys thus indicate that UK and maybe even Denmark have comparatively low employment rates among the disabled, while Sweden has very high rates [19].

6.3 The typical high-risk approach is based on screening for important risk factors and then introducing behavioural or pharmaceutical interventions to modify risk factor levels in those individuals. A multi-factor approach will reduce differential susceptibility (arrow 'C' in Figure A3.1). With such effective treatments and well developed screening in primary care this

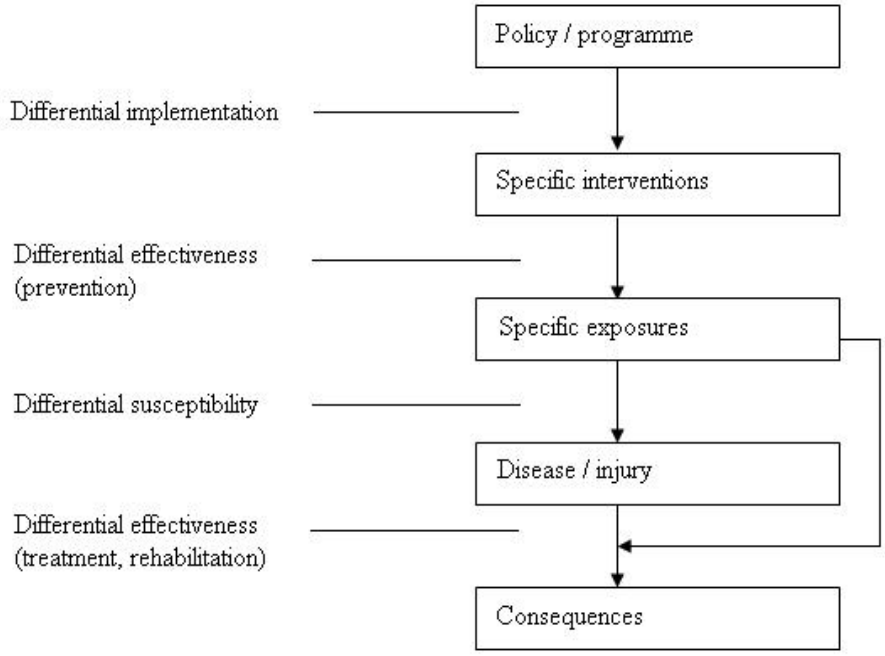
strategy has the potential for major effects on both average health and inequality [14, 15].

6.4 For persons where the social causes and consequences of disease have developed into a vicious circle of poverty, ill health, marginalization, social exclusion, homelessness etc. rehabilitation efforts to reduce the social and economic consequences of disease and disability is a priority (see arrow 'D' in Figure A3.1). These groups often also have serious problems in accessing health care services even when they are free of charge.

7. Equity aspects on evaluation

Since policy making never starts with a "tabula rasa" the interventions that have been prioritized in the previous analytical steps will have to be compared with existing programmes. An evaluation of how well these programmes work from an health equity perspective is then needed. The illustration in Figure A3.2 might be helpful for such a discussion.

Figure A3.2: A model for differential implementation and effectiveness of local programmes for health equity



Local programs for health equity will have to consider to what extent the elements of differential implementation and effectiveness are modified by the local context in terms of resources and structure of institutions.

7.1. *Differential implementation*: Local variations in resources and structure of the institutions necessary to carry out the interventions included in a programme

for health equity. Scarce resources in primary care or schools in underprivileged areas might hinder implementation in those areas.

7.2. Little is known about how *differential* the *effectiveness* of preventive interventions is. Variations in price-elasticity and compliance across socioeconomic groups are examples. To what extent effectiveness of specific interventions is dependent on local contextual conditions, and to what degree it is safe to use data from evaluation in others contexts is a somewhat unresolved matter. For rather upstream interventions the causal chains of intervention effects are long, and many steps can be influenced by confounding and effect modification.

7.3. *Differential susceptibility*. The absolute effect of an exposure on a disease depends on the exposure for other interacting causes, but the relative effect is more independent of population context (see further 3.3).

7.4. *Differential effectiveness* of treatment and rehabilitation. Effects are dependent on compliance. For rehabilitation the collaboration with employers, and the legislation and practice within health and sickness insurance will be crucial. The efficacy of clinical treatment methods are usually regarded more independent of context, but the effectiveness might not be. The latter observation might be much more true for rehabilitation.

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WHO Collaborating Centre for Policy Research on Social Determinants of Health
Division of Public Health
The University of Liverpool
Whelan Building, Quadrangle
Liverpool L69 3GB

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